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THE USE OF SOCIAL MEDIA TO MAXIMIZE ENERGY PERFORMANCE IN THE UNITED STATES MARINE CORPS

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                June 2014

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iii

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ABSTRACT

This research identified social media strategies that could be useful for influencing energy consumption behavior in the United States Marine Corps. We reviewed literature on social learning and media choice that allowed us to develop a media fit/social learning interaction framework for analysis purposes. Using this framework, we conducted a comparative case analysis of eight social media campaigns that varied on factors such as organization structure/culture, program goal, program audience, media used, and program outcome. Results from our analysis show the primary influencers of successful social media campaigns, recommendation(s) for an E2O social media strategy, and a process model explaining how social media can influence behavior change.

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TABLE OF CONTENTS

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LIST OF FIGURES

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LIST OF TABLES

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LIST OF ACRONYMS AND ABBREVIATIONS

ASR	aggregation services router
CEO	Chief Executive Officer
CHINFO	United States Navy Chief of Information
CMC	Commandant of the United States Marine Corps
CRS	carrier routing system
CVD	cardiovascular disease
E2O	Expeditionary Energy Office
EUCOM	United States European Command
IT	information technology
MOS	military occupational specialty
NPS	Naval Postgraduate School
NPS	net promoter score
OPSEC	operations security
RAD	reducing administrative distractions
SACEUR	Supreme Allied Commander Europe
SHDPP	Stanford Heart Disease Prevention Program
SOUTHCOM	United States Southern Command
SMaC	Social Media and Community
SMaC U	Social Media and Community University
TEKCO	Tekcompany
USMC	United States Marine Corps

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I.   INTRODUCTION

In 2010, the war in Afghanistan demonstrated that the Marines continue to be a highly capable and lethal expeditionary force. Maintaining that combative edge in the ever-changing combat environment requires the adoption of new technology, which, in turn, can create a greater demand for energy. Reportedly, the Marine Corps' bases in Afghanistan consumed in excess of 200,000 gallons of fuel per day (USMC Expeditionary Energy Office, 2011, p. 7). In the first three months of 2010, nearly 300 convoys delivered fuel and water to locations throughout the country (USMC Expeditionary Energy Office, 2011, p. 7). Often, these convoys travelled miles in unsecured territory, exposing the Marines who traveled with them to the possibility of ambushes (USMC Expeditionary Energy Office, 2011, p. 8). Unfortunately, during the course of these 300 convoys, six Marines were wounded in insurgent attacks. The USMC Expeditionary Energy Strategy and Implementation Plan pointed out that "Our nation's adversaries recognize this growing vulnerability and target fuel and water convoys, knowing full well the second, third and fourth order effects of disrupting our supply chain" (USMC Expeditionary Energy Office, 2011, p. 7). General James F. Amos, Commandant of the United States Marine Corps (CMC), was explicit, arguing, "Tethering our operations to vulnerable supply lines…degrades our expeditionary capabilities and ultimately puts Marines at risk. To maintain our lethal edge, we must change the way we use energy" (USMC Expeditionary Energy Office, 2011, p. 3).

General Amos created the Expeditionary Energy Office (E2O) in 2009 with the mission to "analyze, develop and direct the Marine Corps' energy strategy to optimize expeditionary capabilities across all warfighting functions" (USMC Expeditionary Energy Office, 2011, p. 5). He envisioned a Corps that is liberated from its dependency on fuel, one that maintains its expeditionary capabilities by staying fast, lethal, and austere, and one that reduces unnecessary risk for its Marines (USMC Expeditionary Energy Office, 2011). The E2O established the USMC Expeditionary Energy Strategy to communicate the "CMC's vision, mission, goals, and objectives for expeditionary and installations energy" (USMC Expeditionary Energy Office, 2011, p. 3). Both the CMC

understand that achieving this vision will require a fundamental change in the way the Marine Corps conduct business. Never before in Marine Corps history has such focus been put on "equating energy and resource efficiency with combat effectiveness" (USMC Expeditionary Energy Office, 2011, p. 3). The Corps wants to create a behavior change that promotes energy performance as a "primary consideration in all aspects of planning, decision making, and execution of the Marine Corps mission" (USMC Expeditionary Energy Office, 2011, p. 3).

In 2013, two related studies were conducted at NPS. One study explored factors that "influence Marines' attitudes and willingness to adopt energy-efficient technologies" (Ciarcia, 2013). Ciarcia found that awareness, perception of functional risk, image, and relative advantage or disadvantage were the factors more likely to lead to the decision to adopt technology or minimize the resistance to that adoption. The other study investigated drivers that may influence Marines to adopt energy efficient technologies" (Nguyen, Eddy, & Greenwald, 2013). Ngyuen, Eddy, and Greenwald concluded that opinion makers, communication channels, and the proper management of perceptions surrounding the new technology were the three most influential drivers that lead Marines to adopt technology. Based on the findings of these two studies, we decided to explore what role social media would play in influencing an individual's use of energy saving technologies in the U.S. Marine Corps.

A. PURPOSE AND RESEARCH QUESTIONS

The purpose of this study is to support the Marine Corps' goal of increasing combat effectiveness through efficient energy using a comparative case analysis to explain the usefulness of social media in influencing large-scale behavioral change. We selected and analyzed eight cases that varied on four categories: internal vs. external communications, successful vs. unsuccessful social media campaigns, new vs. legacy communication methods, and government vs. commercial institutions. These research cases selected from teaching cases, cases used as data in academic studies, company websites and press releases, and reports in news media. Our study identifies themes, events, strategies, drivers, barriers and outcomes in each case and displays the data in

tables and diagrams (within case analysis). Then, we analyzed across the cases to identify patterns, similarities and differences between the cases.

The primary question of this research is: Is social media likely to be effective in the shaping attitudes and behaviors in the U.S. Marine Corps? The secondary questions we answer include:

- How might the Marine Corps use social media?
- What are the influencers to successfully implementing a social media campaign?

This study draws from academic literature on Bandura's social learning theory and social cognitive theory, Daft and Lengel's media richness theory, and Kock's media naturalness theory.

B.   RESEARCH APPROACH

Research suggests that social media can generate behavioral change (Lewis, 2011). Our study conducts a comparative case analysis to investigate the effect of social media across multiple organizations selected to represent varied organizational characteristics and goals and methods of using social media. The goal of the study was to identify which situations and organization types certain mediums of social media are effective and ineffective. Based on our findings, we identify influencers of social media that might affect the creation of cultural change in the United States Marine Corps. A detailed description of our method is discussed in Chapter IV.

Using academic literature, we developed a theoretical framework categorizing social media along two dimensions related to behavioral change. This theoretical framework guided the selection and analysis of cases.

C.   ORGANIZATION OF STUDY

This report examines the effectiveness of using social media to create behavioral and cultural change within the USMC within the realm of energy efficiency. Chapter II presents a context for the study. Chapter III presents a literature review on the academic concepts and theoretical models to compose the research framework. Chapter IV

explains the methodology of this study to include the selection criteria for the case studies used in the research. We discuss the implications of our findings in Chapter V through within-case and cross-case analyses. We conclude with recommendations for the use of social media in Chapters VI.

II.   BACKGROUND

A.   INTRODUCTION

This chapter cites recent studies in order to identify social media trends in today's digital world and within the U.S. Marine Corps. It will clarify what communication mediums are included in the term social media for the purpose of this study. The purpose of this chapter is to create context for the analysis and findings of this study.

B.   WHAT IS SOCIAL MEDIA?

Social media is described as the different means by which people connect with one another to share information and engage in conversations on topics of mutual interest (Department of the Navy, Office of Information, 2011). Social media often refers to digital media such as social networking sites, blogs, and online videos. It is difficult to define social media simply as a list of social networking sites or blogs since new platforms are continuously created and popularized. The Conversation Prism (Figure 1) below includes many of the social media platforms that were in use when it was updated in 2013 (Solis, 2013). If it were updated today, it would include additional platforms.

The military has recognized the importance of social media. Senior military leadership such as Admiral James Stavridis adopted and popularized the use of social media. As Southern Command (SOUTHCOM), Admiral Stavridis was the first geographic combatant commander to use Facebook and a personal blog (Miles, 2009). Those tools gave him the means to convey the importance of partnership and cooperation to confront threats facing Latin America and the Caribbean. His success in using social media to communicate his message led him to continue using it as European Command (EUCOM) and Supreme Allied Commander Europe (SACEUR). The U.S. Navy Chief of Information (CHINFO) argues that it is important for an organization to be familiar with the strengths and capabilities of emerging social media platforms. An organization must be able to communicate "in the near-real time environment of social media, and be responsive to the comments and feedback of [their] audiences" or risk that its audience

"will simply get their information elsewhere" (Department of the Navy, Office of Information, 2011, p. 4).

Figure 1.   Conversation Prism (from Solis, 2013)

C.   SOCIAL MEDIA TRENDS

The data collected by the Pew Research Center on the Internet and social media habits of the digitally-connected give a clear picture of current trends in social media. Based on their findings, it is difficult to argue against the impact digital media has made on the way today's society communicates. The studies show a steady increase in Internet

use for every demographic of today's society (Figure 2). Surprisingly, this includes adults 65 and older who are commonly considered to be the most resistant to the adoption of new technology. Given the goals of this study and the population of the Marine Corps, the focus of this study is the 18-29 and 30-49 age groups.
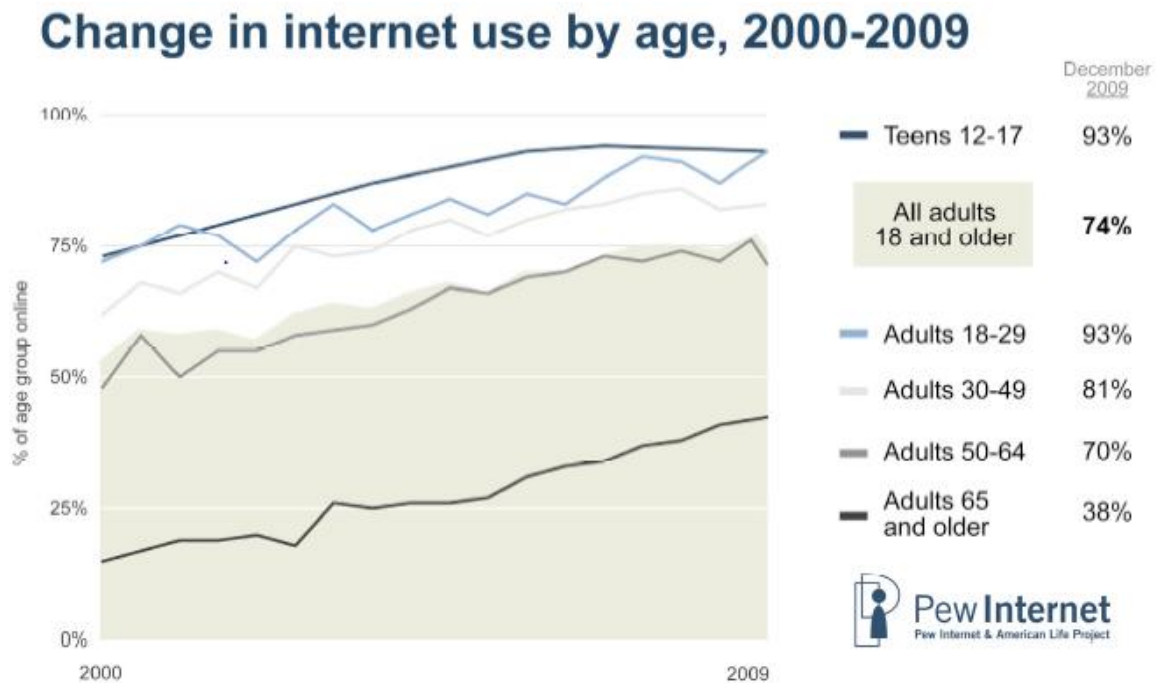
Figure 2.   Change in Internet Use by Age, 2000-2009
(from Pew Research Center, 2013)

Coinciding with the rise in internet use was a rise in the use of social networking sites, a major contributor to the category social media (Pew Research Center, 2013). Although the data were collected over a different time period, Figure 3 shows that a rise in the use of social networking sites is evident amongst all ages. According to the studies (Figure 4), "73% of online adults now use a social networking site of some kind" and 42% use multiple social networking sites (Pew Research Center, 2013, p. 1). The data in Figure 4 are based on the use of five of the major social networking sites in use today: Facebook, Twitter, Instagram, Pinterest, and LinkedIn. More users use multiple sites than only one. The frequency which users access social media is also an important and distinguishing characteristic. Figure 5 displays the number of daily Facebook, Twitter,

7

and Instagram users dwarf the number of less frequent users. It is evident from these findings that the Internet and social media are becoming one of the most popular means of communicating.

Social networking site use by age group, 2005-2013
% of internet users in each age group who use social networking sites, over time
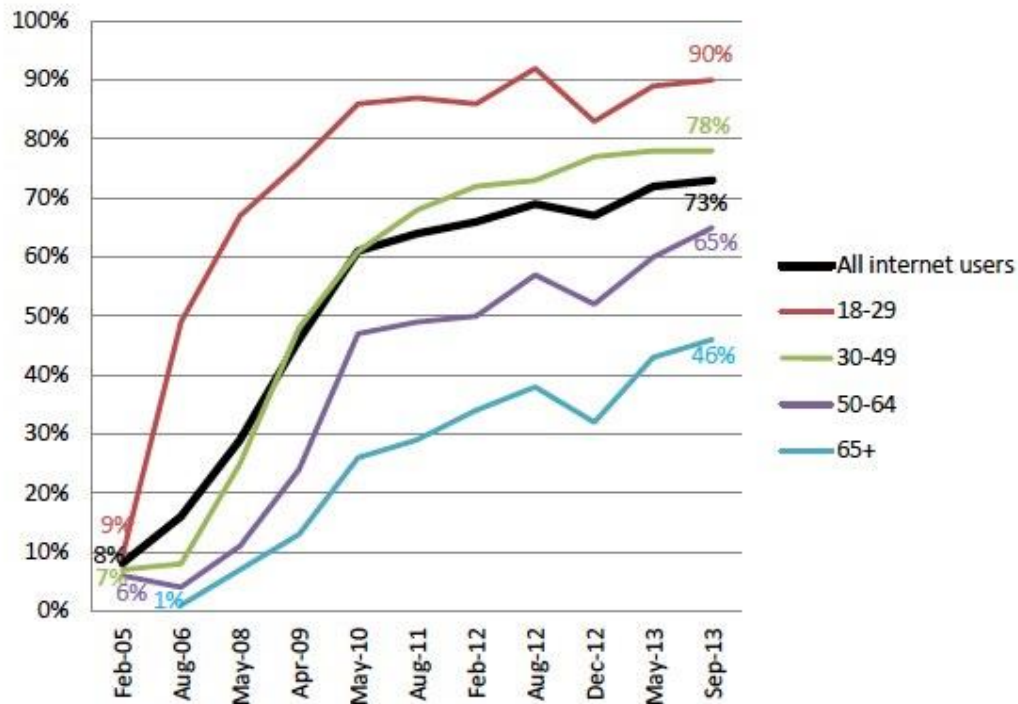
Source: Latest data from Pew Research Center's Internet Project Library Survey, July 18 – September 30, 2013. N=5,112 internet users ages 18+. Interviews were conducted in English and Spanish and on landline and cell phones. The margin of error for results based on internet users is +/- 1.6 percentage points.

Figure 3.   Social Networking Site Use by Age Group, 2005-2013
(from Pew Research Center, 2013)

Number of social media sites used

% of internet users who use the following number of social networking sites (sites measured include: Facebook, Twitter, Instagram, Pinterest, and LinkedIn)
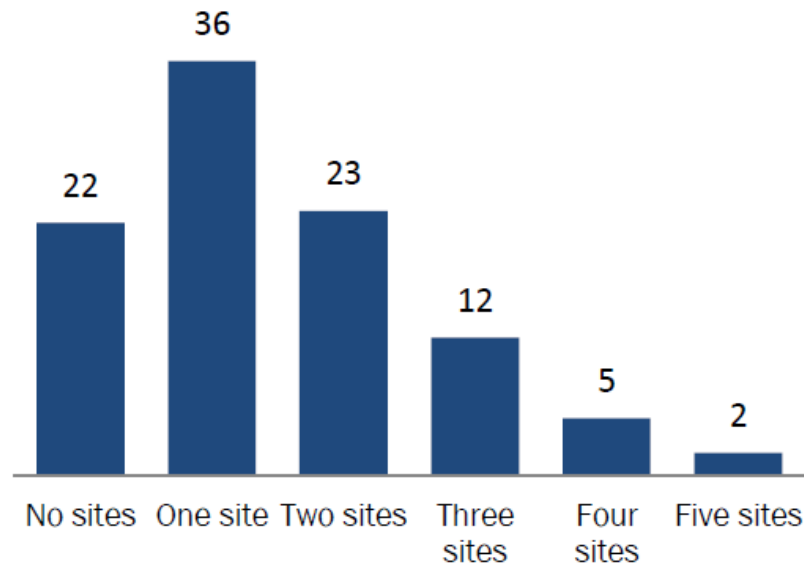
Pew Research Center's Internet Project August Tracking Survey, August 07 –September 16, 2013. N=1,445 internet users ages 18+. Interviews were conducted in English and Spanish and on landline and cell phones. The margin of error for results based on all internet users is +/- 2.9 percentage points.

PEW RESEARCH CENTER

Figure 4.   Number of Social Media Sites Used
(from Pew Research Center, 2013)

Frequency of social media site use

% of social media site users who use a particular site with the following frequencies (% is reported among each specific site's user groups, e.g., 63% of Facebook users use the site on a daily basis)
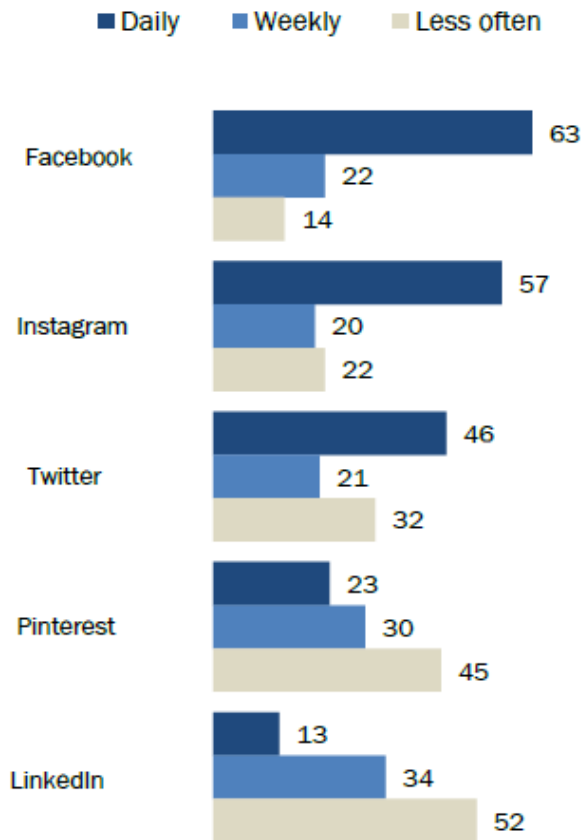
■ Daily ■ Weekly ▪ Less often

Facebook
- 63
- 22
- 14

Instagram
- 57
- 20
- 22

Twitter
- 46
- 21
- 32

Pinterest
- 23
- 30
- 45

LinkedIn
- 13
- 34
- 52

Pew Research Center's Internet Project August Tracking Survey, August 07 –September 16, 2013. Interviews were conducted in English and Spanish and on landline and cell phones.

PEW RESEARCH CENTER

Figure 5.   Frequency of Social Media Site Use
(from Pew Research Center, 2013)

Combined with findings of the Pew Research studies, user statistics collected from various social media sites support the conclusion that the popularity of social media is growing. Social media use is gaining recognition as the norm rather than the

exception. As of March 2014, Facebook reported to have on average 802 million daily active users with 609 million mobile daily active users. Monthly, they have 1.28 billion monthly active users with 1.01 billion mobile monthly active users (Facebook.com, 2014). YouTube, the online-video forum, reports greater than 1 billion unique monthly users who watch over 6 billion hours of video. Users upload videos at a rate of 100 hours per minute (YouTube, 2014). Twitter, the social networking and microblogging service, has 255 million monthly active users who send 500 million Tweets per day. Acquired by Facebook in 2012, Instagram, the photo and video-sharing service, reports 200 million monthly active users who share an average of 60 million photos per day. After having only 5,000 users in 2010, Pinterest became crossed "the 10 million [unique monthly user] mark faster than any other standalone site in history" (Constine, 2012). The Social Media Update 2013 (Pew Research Center, 2013) found Pinterest surpassed the more senior Twitter and Instagram in percentage of all online users who follow the site.

D.   SOCIAL MEDIA AND THE MARINE CORPS

The Marine Corps has been paying attention to the societal impact of social media as demonstrated in studies and academic research. Currently, the USMC officially sponsors 368 Facebook sites, 33 Flickr sites, 70 Twitter accounts, 41 YouTube pages, 2 Tumblr sites, two Google+ pages, six blogs, and a Pinterest page (U.S. Marine Corps, 2014). At just under 3.5 million "likes", the United States Marine Corps Facebook page has the largest audience of all the other military services' Facebook pages (United States Marine Corps, 2014). Interestingly, in August of 2009 the Marine Corps banned social networking sites from Marine Corps Enterprise Networks (MCEN). It was in February 2010 that the USMC finally became the last service to allow the use of social media on their networks (Knabe, 2013). In the MARADMIN announcing the ban, a social networking site was defined as a "web-based services that allow communities of people to share common interests and/or experiences…or…to explore interests and background different from their own" (Allen, 2009). These characteristics, which defined the banned social networking sites, today may prove to be an important factor in enacting behavioral change in the Marine Corps.

In order to address the strengths as well as the vulnerabilities of social media, the Marine Corps released the Social Corps, the U.S.M.C Social Media Principles, in 2011 (Marine Corps Production Directorate, 2011). One of the contributors to this handbook was Staff Sergeant Mark Fayloga who served as a Marine Social Media Strategist. In 2013, Fayloga was interviewed by Lt. Col Knabe of the National Defense University during the study, "Social Media Measurement: How the U.S. Military Evaluates Success in its Social Media Programs" (Knabe, 2013). The following are key findings that came from her interview:

- The Marine Corps focus on Facebook was "examining who is talking about the service" and "who is sharing the message (viral rate)" (Knabe, 2013, p. 29).

- 70% of Marine Corps followers on Facebook fell in the 13 to 23-year-old range (Knabe, 2013, p. 29).

- The focus on Twitter was the "conversation that's occurring from content [that Marines are] posting. This allows the Twitter monitors to gauge "command climate." An example of a change in command climate was evident on Twitter immediately following a tweet announcing the change in the physical fitness standards" (Knabe, 2013, p. 29).

- Twitter is recognized as an avenue to communicate changes in policy to service members due to its ability to encourage unfiltered feedback from Marines. This allows for the recognition of emerging patterns of concern within its ranks. This information can be used to "create a blog or story content to reinforce or clarify policy" (Knabe, 2013, p. 29).

- Flickr was recently remodeled to only display two of its "best" photos of the day which allowed for easier tracking of responses to them. While FB allows an easier medium to post more pictures, the quality of the photos on Flickr result in more secondary sources downloading the photos for reposting on other wider ranging publications and sites such as Wired magazine and Business Insider (Knabe, 2013, p. 30).

- Pinterest is the anomaly in the Marine Corps social media portfolio since it's followership on that site is 90% female. This differs from the 50/50 split or predominantly male followership on its other sites. Taking into account the audience, the Marine Corps increased Pinterest followership by 12,000 in a 36 hour time-span by posting daily Marine Corps workouts under a campaign titled "Dump the Plump" featured during Pinterest's "30 Days of Pinspiration" (Knabe, 2013, p. 30).

Headquarters Marine Corps (HQMC), Division of Public Affairs (DivPA) sponsored a study to "ascertain the overall effectiveness of the current Marine Corps

internal communication effort" and to determine Marines "preferred channels of communication" (HQMC DivPA, 2011, p. 1). Although the focus of the study was on how well "news" was disseminated, it did give insight into the effectiveness of social media channels. Figures 6 and 7 show the percentage of Marines by age and rank respectively that used a specific communication channel to receive news pertaining to the Marine Corps.

	All Marines	Marine Age							
		17-20 (A)		21-24 (B)		25-36 (C)		37+ (D)	
Word of Mouth	70%	72%	D	70%	D	70%	D	65%	ABC
Chain of Command	64%	65%		63%		65%		67%	
www.marines.mil/ www.usmc.mil	58%	53%	CD	53%	CD	62%	ABD	69%	ABC
Marine Corps Times/website	50%	38%	BCD	47%	ACD	58%	AB	59%	AB
Online Search Engines	50%	47%	BCD	43%	ACD	57%	AB	59%	AB
MARADMINs/ALMARs	47%	25%	BCD	33%	ACD	64%	ABD	86%	ABC
Base newspaper/magazine	32%	29%	CD	28%	CD	35%	ABD	49%	ABC
Base website	27%	22%	CD	21%	CD	33%	ABD	40%	ABC
Marines Magazine	22%	33%	BCD	19%	AD	20%	AD	25%	ABC
Family Readiness Officer	21%	20%	BCD	15%	ACD	26%	ABD	30%	ABC
Unit website	19%	22%	BD	13%	ACD	21%	BD	31%	ABC
Leatherneck Magazine/website	18%	26%	BCD	16%	AD	16%	AD	21%	ABC
USMC Facebook Page	16%	24%	BCD	14%	A	14%	A	11%	A
Marine Corps Gazette/website	15%	15%	BD	10%	ACD	17%	BD	31%	ABC
Unit newsletter/ magazine	12%	13%	BCD	7%	ACD	16%	ABD	22%	ABC
American Forces Network	11%	20%	BCD	9%	A	10%	A	11%	A
USMC YouTube Channel	8%	13%	BCD	7%	AD	8%	AD	4%	ABC
Marines TV	8%	15%	BCD	6%	A	6%	A	8%	A
Pentagon Channel	8%	11%	BC	5%	ACD	8%	ABD	12%	BC
USMC Blog	2%	8%	BCD	1%	AC	2%	AB	1%	A
USMC Flickr Page	1%	6%	BCD	0%	ACD	1%	AB	1%	AB
USMC Twitter Account	1%	4%	BCD	0%	ACD	1%	AB	1%	AB

Figure 6.   Sources Used by Marines in the Past 90 Days to Receive USMC News and Information (from HQMC DivPA, 2011)

	All Marines	Marine Rank									
		Junior Enlisted		Junior Officer		Senior Enlisted		Senior Officer		Warrant Officer	
		(A)		(B)		(C)		(D		(E)	
Word of mouth (peers, scuttlebutt)	70%	70%	BC	77%	AC	64%	AB	72%		70%	
Chain of command	64%	63%	BD	73%	AC	65%	B	73%	A	71%	
www.marines.mil / www.usmc.mil	58%	54%	BCDE	69%	A	67%	AD	74%	AC	74%	A
Online Search Engines	50%	47%	BCDE	63%	AC	56%	ABD	68%	AC	65%	A
Marine Corps Times/website	50%	47%	BCDE	60%	A	60%	A	56%	A	64%	A
MARADMINs/ALMARs	47%	35%	BCDE	82%	AD	82%	AD	92%	ABC	91%	A
Base newspaper/magazine	32%	29%	BCDE	39%	ADE	41%	ADE	50%	ABC	56%	ABC
Base website	27%	23%	BCDE	43%	AC	37%	AB	41%	A	43%	A
Marines Magazine	22%	23%	B	18%	A	21%		23%		23%	
Family Readiness Officer	21%	18%	BCDE	29%	A	29%	A	27%	A	30%	A
Unit website	19%	16%	BCDE	26%	A	26%	AD	33%	AC	33%	A
Leatherneck Magazine/website	18%	18%		21%		18%		16%		23%	
USMC Facebook page	16%	17%	BCD	11%	A	14%	A	11%	A	11%	
Marine Corps Gazette/website	15%	11%	BCDE	42%	ACDE	18%	ABDE	50%	ABCE	29%	ABCD
Unit newsletter/magazine	12%	10%	BCDE	22%	AC	17%	ABDE	22%	AC	27%	AC
American Forces Network	11%	11%		12%		11%		12%		15%	
Marines TV	8%	8%		6%		8%		5%		7%	
Pentagon Channel	8%	7%	CD	9%		10%	A	13%	A	13%	
USMC YouTube channel	8%	9%	BCD	4%	AC	7%	AB	4%	A	5%	
USMC Blog	2%	3%	BC	1%	A	1%	A	2%		1%	
USMC Flickr page	1%	2%	CD	1%		1%	A	1%	A	0%	
USMC Twitter account	1%	1%		1%		1%		1%		0%	

Figure 7.   Sources Used by Marines in the Past 90 Days to Receive USMC News and Information (from HQMC DivPA, 2011)

Their findings revealed similarities with data collected for the Pew Research studies. Despite the differences between the unique culture of the Marine Corps and the culture existing in the general population, these data sets suggest that strategies that were effective in the greater population may be effective in the Marine Corps.

The Social Corps handbook warns that "if you don't know and understand the audiences you are communicating with, then the interaction will be of limited value" (Marine Corps Production Directorate, 2011).   For this reason, it is important to understand who exactly amongst Marines is your message targeting.   In a study conducted by the Headquarters of the Marine Corps, Marine and Family Programs the Corps was found to "the youngest" and "most junior…of the four military Services" (Marine Corps Community Services (MCCS), 2013, p. 2).   "Sixty-three percent of Marines are 25 and younger," (HQMC, Marine and Family Programs, 2013, p. 2) and "42

percent of Marines rank E-3 or below" (HQMC, Marine and Family Programs, 2013, p. 11). The Pew Research Center's 2013 Social Networking Fact Sheet pointed out that "90% of Internet users 18-29 use social networking sites" (Pew Research Center, 2013).

Who uses social networking sites
% of internet users within each group who use social networking sites

		% who use social networking sites
All internet users 18+ (n=5,112)		73%
a	Men (n=2,368)	69
b	Women (n=2,744)	78[a]
Race/ethnicity		
a	White, Non-Hispanic (n=3,617)	72
b	Black, Non-Hispanic (n=532)	73
c	Hispanic (n=571)	79[ab]
Age		
a	18-29 (n=929)	90[bcd]
b	30-49 (n=1,507)	78[cd]
c	50-64 (n=1,585)	65[d]
d	65+ (n=1,000)	46
Education attainment		
a	No high school diploma (n=243)	74
b	High school grad (n=1,238)	69
c	Some College (n=1,461)	75[b]
d	College + (n=2,144)	75[b]
Household income		
a	Less than $30,000/yr (n=1,212)	77
b	$30,000-$49,999 (n=886)	73
c	$50,000-$74,999 (n=746)	73
d	$75,000+ (n=1,600)	75
Urbanity		
a	Urban (n=1,605)	76[bc]
b	Suburban (n=2,585)	72
c	Rural (n=922)	70

Source: Pew Research Center's Internet Project Library Survey, July 18 – September 30, 2013. N=5,112 internet users ages 18+. Interviews were conducted in English and Spanish and on landline and cell phones. The margin of error for results based on internet users is +/- 1.6 percentage points.
Note: Percentages marked with a superscript letter (e.g., [a]) indicate a statistically significant difference between that row and the row designated by that superscript letter, among categories of each demographic characteristic (e.g. age).

Figure 8.   Who Uses Social Networking Sites
(from Pew Research Center, 2013)

Given this data, it is reasonable to expect that 68% of Marines ages 17-20 and 64% ages 21-24 use social networks for news.
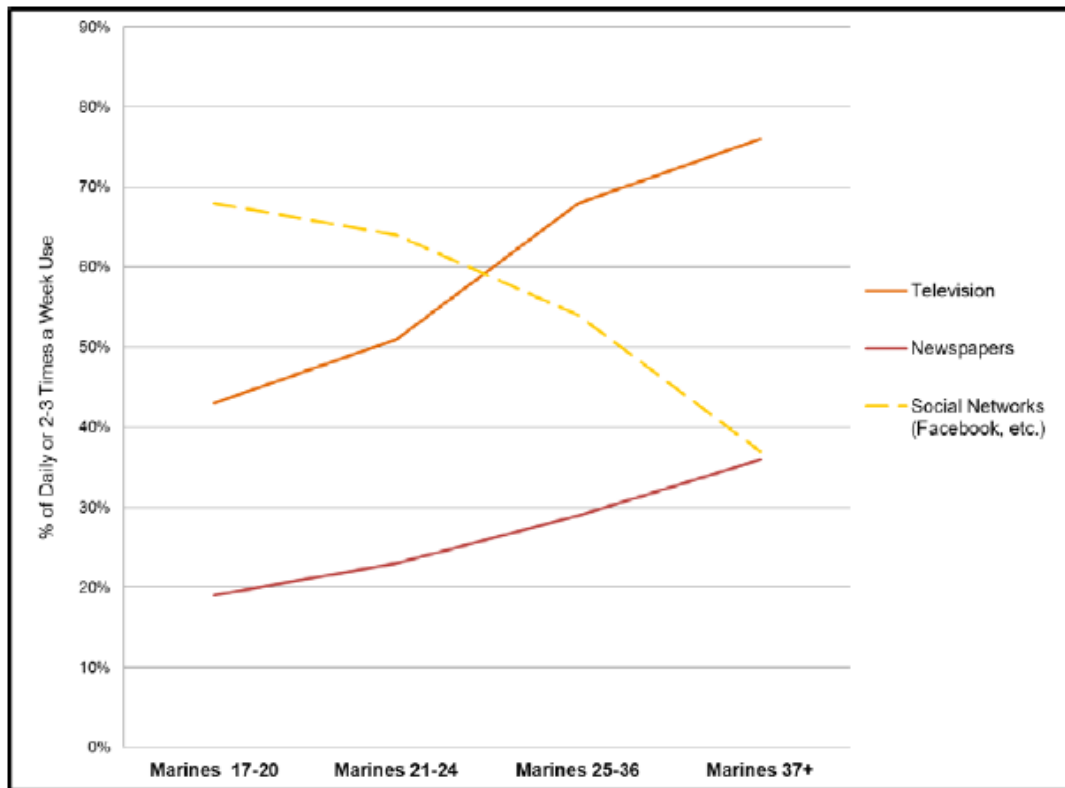
Figure 9.   Marines by Age: Sources Used for General News
(from HQMC DivPA, 2011)

"Social networking sites such as Facebook are popular with younger Marines" (HQMC DivPA, 2011, p. 1). An interesting caveat to that finding is that these Marines "are reluctant to access social networking sites for Marine news and information because of privacy and security reasons" (HQMC DivPA, 2011, p. 1). Respondents were keen on keeping the social aspect of social media social and not work-related. This is reflected in the social media channels being ranked in the bottom half of most popularly used information channels (Figures 6 & 7).

Despite the overall reluctance for combining the social aspect and work-related information within social media, Marines have expressed an interest in using social media channels for USMC news and information.   Compared to the only an 8% use by

Marines of their services' YouTube channel, YouTube ranked second highest in the percentage of Marines who are interested in using it. Interestingly, Chain of Command and Word of Mouth, two channels reasonably argued as highly differentiated from social media rank at the bottom of this list.
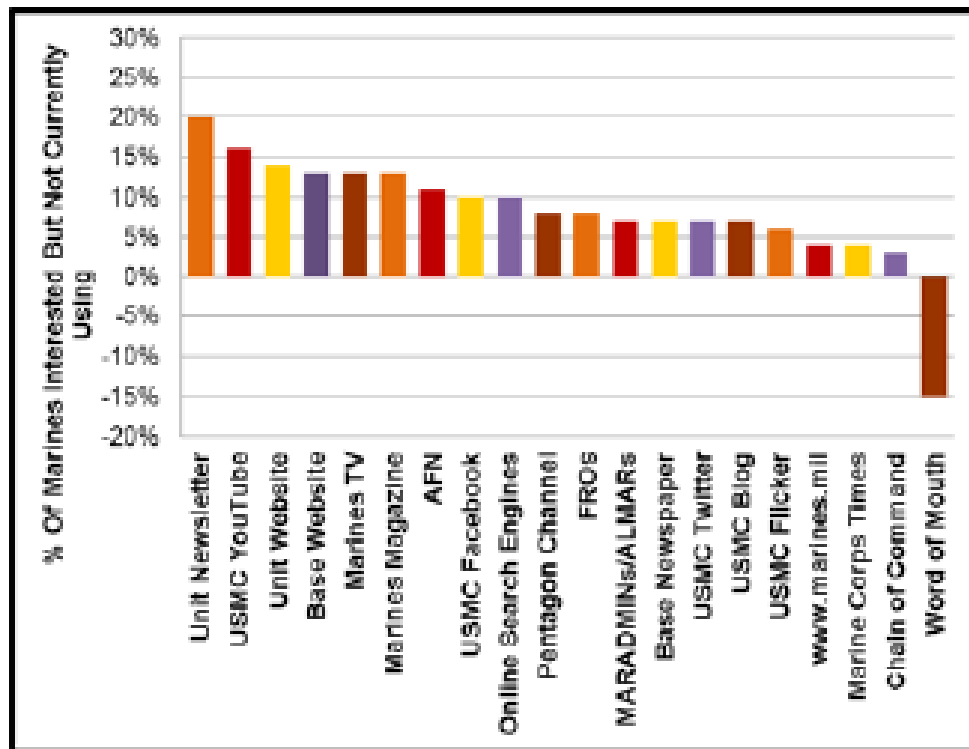
Figure 10.   Marines: Percent Interested But Not Currently Using
(from HQMC DivPA, 2011)

Through data collected in several Pew Research studies and the study conducted by the U.S. Marine Corps Division of Public Affairs, similarities, differences, and trends in social media were identified. Based on the findings, the use of social media in many organizations is increasing in both number of occurrences and in popularity. The next chapter will look into theories explaining the creation of behavior change and learning in order to identify a possible connection between the effects of social media and behavior change within an organization.

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III. LITERATURE REVIEW

A. INTRODUCTION

This chapter focuses on the academic literature related to a) an individual's ability to learn and replicate behaviors and b) communication models to increase effectiveness in messaging. Social learning theory, social cognitive theory, media richness theory, and media naturalness theory contribute to this study's theoretical framework. This framework provides a lens that we used as a key premise for this research: social media, as a business communication medium, has the potential to encourage behavioral change within an organization and effectively communicate message content.

B. INFLUENCES ON BEHAVIORAL CHANGE

Behavioral change research has its roots in social psychology. Albert Bandura, one of the most published social psychologists from 1950 – 2000, was ranked the fourth most prominent psychologist with 5,381 cites in professional psychological journals (Haggbloom et al., 2002). Bandura's social learning theory (1977), focused on how individuals learn and acquire behavioral patterns throughout their lifetime. He also explained how individuals use a vigorous modeling process to continuously regulate themselves through individual and various social influences. Before Bandura published his foundational social learning theory, he first studied the aspects of observational learning.

Observational learning became popular with the Bobo Doll experiment (Bandura, Ross & Ross, 1963). In this experiment, children were exposed to three types of modeled behavior: a live model in which an individual demonstrated the aggressive behavior (punching and kicking a Bobo doll), a verbal instructional model in which an individual describes the aggressive behavior, and a symbolic model in which a cartoon film (media) was displayed performing the aggressive behavior on the Bobo doll. The children in the experiment who were exposed to the live model or the symbolic model were twice as aggressive towards the Bobo doll as the children who were just exposed to verbal instructions (Bandura, Ross & Ross, 1963).

19

Further research by Bandura (1977) explained how individuals use a modeling process for behavior. The review of this particular theory focuses on how individuals learn through observational learning and the modeling process, particularly the use of four sub processes: attentional, retention, reproduction, and reinforcement and motivation processes.

Attentional processes require individuals to recognize the essential features of the modeled behavior. Bandura (1977) states that mere exposure to the model will not illicit compliance, but simply allows the individual to ignore or accept specific aspects of the behavior and model themselves accordingly. Individuals tend to have interpersonal attraction to the selected model due to interesting characteristics. These interesting characteristics prompt the individual to focus on the modeled behavior and allow for observational learning to take place (Bandura, 1977).

Once the individual has attended to the model or individual, there must be retention of the actual observation (Bandura, 1977). Bandura defines retention processes as the long term retention of the modeled behavior. Bandura states that imagery and verbal representation systems, absent of stimuli, are the two ways in which an individual can recall previously observed modeled behavior. Verbal coding tends to be cognitively easier to recall then images. For example, Bandura discusses a sequence of turns on a travel route being easier to recall by storing RLRRL instead of right, left, right, right, then left. Once the observed modeled behavior has been coded into one of these two representation systems, it is paramount the individual rehearse the observation mentally. If the observation is not rehearsed, the ability to recall that behavior will be reduced.

Now that the individual has attended to and retained the modeled behavior, he must physically reproduce the behavior. Bandura (1977) refers to this as motoric reproduction processes. The individual must recall the modeled behavior, apply it to the current situation, and physically enact the said behavior. A problem arises if the individual does not have the set of skills necessary to reproduce the behavior. The skills have to be developed and honed to allow for the reproduction to occur. The individual will make an approximation of the expected behavior based on the recalled observation

and make corrective actions as necessary to refine the result. This works well for simple tasks, but complex tasks may require feedback from others based on the results.

The final component that Bandura discusses in the modeling process is reinforcement and motivational processes. An individual could have attended to, encoded and retained, and developed the skills necessary to reproduce the behavior; however, one needs to have positive incentives to display the observational behavior (Bandura, 1965). If there are negative incentives, resulting in decreased motivation, then the behavior will not be exhibited. Positive and negatives motivations will affect whether the individual will actually observe, retain, and reproduce future observational learning. In order to elicit future reproduction of desired behavior, models must have matching behavior and motivation.

Bandura expanded further on his social learning theory by delving deeper into human behavior and determining how it is shaped by not only the observational modeling process but by the environment as well. Bandura (1978) lays out the framework that describes the three factors that affect behavior: behavioral factors, environmental factors, and cognitive factors themselves. Each of these three factors can influence the other two depending on the situation. Each factor is not unidirectional, but potentially bidirectional as it can influence one or both of the other factors making them reciprocal in nature. Human behavior is determined by the influences of the three factors (Figure 11).

Cognitive Factors
(also called "Personal Factors")
· Knowledge
· Expectations
· Attitudes

Determines Human Behavior

Environmental Factors
· Social Norms
· Access in Community
· Influence on Others
(ability to change own environment)

Behavioral Factors
· Skills
· Practice
· Self-efficacy
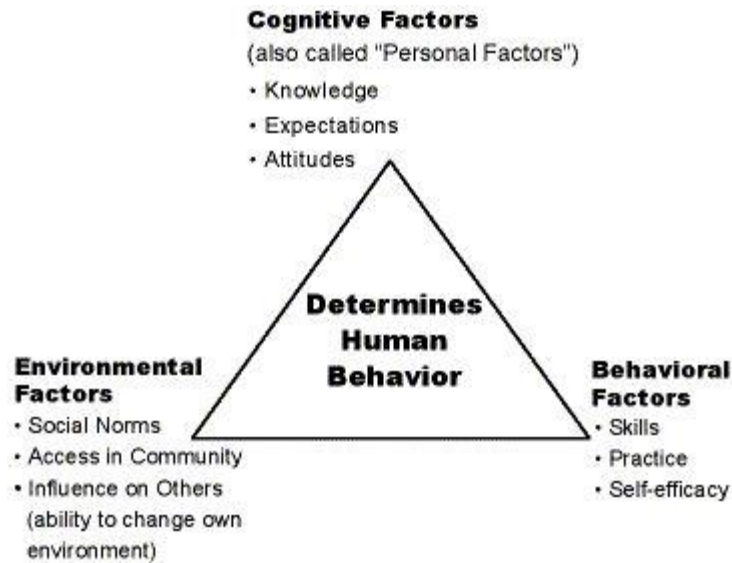
Figure 11.   Social Learning Theory Model (from Bandura, 1978)

Behavioral factors are the learned responses that derive from the observational modeling process. As previously discussed, through a four-step sub-process, individuals will attend, retain, reproduce, and reinforce specific behavior based on learned observation. As the individual codifies the model and mentally reproduces the behavior, he or she is able to retain the model and develop the necessary skills to develop self-efficacy. The self-efficacy will allow the individual to be prepared for success should a situation occur that requires that anticipated behavior. The level of self-efficacy influences the individual's confidence level for performing the learned model.

Environmental factors are comprised of actual physical surroundings, physical features of the individuals present (height, sex, attractiveness, etc.), and social norms such as an individual's ability to influence or be influenced by a specific personal role or status (Bandura, 1978). Depending on the context of the communication setting, specific social norms can be incredibly influential such as those found in military organizations or executive level meetings. This influence may suppress both cognitive and behavioral factors based on the level of influence he or she possesses.

Cognitive factors are developed through life experiences and shape expectations of a specific situation. If behavior X has resulted in positive rewards in the past, the individual will most likely possess a strong positive attitude towards the performance of

that recalled learned mode. Conversely, if behavior X has resulted in negative punishment, the individual will have an apprehensive attitude towards exhibiting that model. This belief system is a strong determinant with respect to the level of influence both the environmental and behavioral factors will have on the cognitive factors and resulting human behavior.

The reciprocal nature of the three factors (cognitive, environmental, and behavioral) allows for each factor to influence the other factors depending on the situation. For example, if an individual's behavioral factors are weak due to limited self-efficacy or lack of practice of the recalled model, and the environmental factors dictates that he is engaging with the chief executive officer (CEO) of the company, the individual may be tentative about expressing the expected behavior. His beliefs, or cognitive factors, recall previous experiences where non-confident behavior resulted in a long-term perception problem of his ability with the CEO. Therefore, environmental and cognitive factors have greatly influenced the behavioral factors and changed the way the individual will behave. Conversely, if the same situation arises, but the environmental factors dictates the individual is surrounded by trusted peers or subordinates, he may express the behavior based on his social role within the organization. His belief and expectations (cognitive factors) are based on his trust for his peers and subordinates and their acceptance of his social role. In this example, his behavioral and cognitive factors have influenced the environmental factors and the resulting behavior.

Although Bandura's social learning theory was published in the 1970s, he has continued to develop his theory to incorporate the technologies of the new media age, specifically social media. Bandura (2001) discusses the psychosocial mechanisms that influence individual action and affect based on the exposure to mass media. Bandura discussed the importance of observational learning and the modeling process in the Social Learning Theory, but that was based in an era in which social media did not exist. In 2001, he acknowledges the importance that the various forms of mass media in the digital age have on influencing the actual modeling process (Bandura, 2001).

Bandura's dual path of influence describes two paths: a direct influence path straight from media to the individual to create behavior change, and the path in which

media influences the social system and networks, which in turns influences the individual to create behavior change. Regardless of which path is taken, media informs, guides, enables and motivates individuals (Bandura, 2001). A simple representation of the model is shown in Figure 12.

DUAL PATH OF INFLUENCE
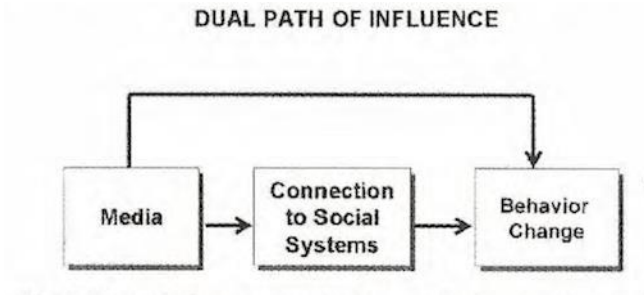
Figure 12.   Dual Path of Influence (from Bandura, 2001)

As an individual goes through the modeling processes (attentional, retention, reproduction, and reinforcement and motivation), positive and negative reinforcements are observed and noted (Bandura, 1977). In media-related social networks, individuals will initially be hesitant towards adopting new models until the consequence of such a model becomes advantageous to imitate. Early adopters play a key role in the social system to encourage and support the diffusion of the model to others (Bandura, 2001). The direct path can simply teach the model and expected outcomes to the individual, while the path that flows through the social system can reinforce and support the modeled behavior because of the social influences (Bandura, 2001).

Social network structure is a major factor in determining the rate of adoption in the social cognitive theory of mass communication (Bandura, 2001). A social network structure can be composed of numerous multi-linked social networks, of which some may be interconnected resulting in multiple interactions daily, too loosely connected with little interaction. Each individual may belong to numerous social networks and have different roles as part of the social norm within each network. Regardless of what role the individual plays in the social network or the level of interaction, individuals are more likely to learn new ideas from those individuals and networks that interface infrequently compared to the daily interaction that occurs in some networks (Bandura, 2001). Social

media has allowed for the expansion of the number of networks that individuals can belong to without having to be physically present in the network allowing greater interface with many different individuals on a frequent basis.

C.   WHY MEDIA CHOICE IS IMPORTANT

Effective organizational communication has been a constant issue between managers and their employees. The ability for a manager to effectively select the type of medium to communicate simple and complex messages has proven paramount in meeting organizational goals and improving performance. There are many academic theories that have discussed the media choice dilemma. Our research framework focuses on a foundational theory, media richness theory and a more recent theory media naturalness theory with respect to media choice.

Daft and Lengel's media richness theory (1983) was designed to improve executive management's decision processes within organizations on media selection. Each and every day, there are multiple messages that are required to be distributed within the organization. Some of those messages are simple, and some of those messages are complex. The manager is responsible to match the richness of the media choice to the level of potential ambiguity to ensure effective communication (Daft & Lengel, 1986). Choosing which communication medium is paramount for ensuring success. If a message has the ability to be equivocal, then the media choice should be rich in nature to eliminate the possibility the message will be transferred and decoded incorrectly by the receiver (Daft & Lengel, 1986).

Daft and Lengel's media richness theory focused on communication based on a richness scale (Figure 13). "Richness is defined as the potential information carrying capacity of data" (Daft & Lengel, 1983, p. 7). Simple tasks can be communicated through leaner mediums such as general email, documents, or posters; however, the more complex messages have to be communicated through richer mediums. There are four characteristics that determine richness: capacity for immediate feedback, capacity for multiple simultaneous cues, the utilization of natural language, and the capacity to have a personal focus (Daft & Lengel, 1983).
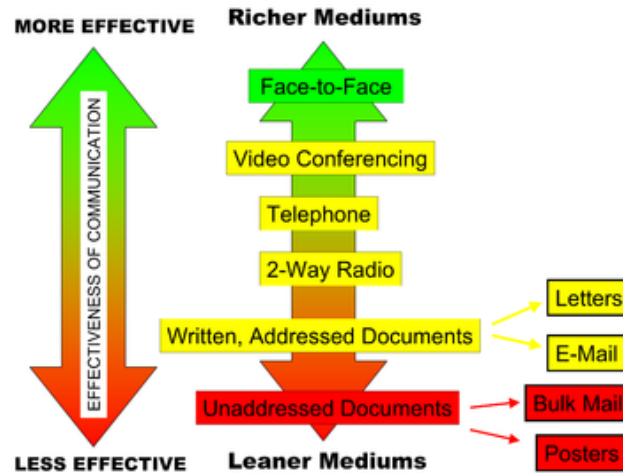
Figure 13.   Media Richness Theory Model (from Daft & Lengel, 1983)

In richer mediums, the communication method allows for simultaneous cues that both the sender and receiver can engage in and respond accordingly resulting in feedback. The richest medium is face-to-face because it allows for the individual to immediately take into account body language, voice tonality, and facial expressions. Each of these cues can relay positive or negative feedback, understanding or confusion, or acceptance and denial between both the sender and receiver. As one moves down towards less media richness, the communication process moves away from face-to-face and begins to remove various combinations of these informational cues. For instance, a telephone conversation may allow for tonality cues in the voice, but removes facial expressions and body language cues thus limiting potential feedback. That same conversation done through video teleconferencing will generate a more robust interaction because of body language cues. Taking that same conversation one step further, using a high definition, life-size video conferencing system such as CISCO TelePresence technology can now introduce facial expression cues in addition to the voice and body language cues to simulate a face-to-face interaction and make the medium rich.

Different types of communication mediums must also take into account the type of language used in the message. Daft and Wiginton (1979) define two types of languages: low variety or high variety. Low variety tend to communicate simple messages that are not very ambiguous and narrow in meaning, while high variety

26

language tend to be equivocal in nature and can communicate a various ranges of ideas. The natural language concept is using the right variety of language in the right type of medium. Complex language that is ambiguous and symbolic in nature for a complex task or message would be unnatural in an email; however, low variety language such as simple mathematics or rudimentary charts would be more appropriate in that leaner medium.

The personal focus of the communication is also imperative to the media richness theory. Face-to-face and voice communication are personal in nature and thus rich, whereas generic media such as posters, billboards, or even a mass email are not personal in nature and are considered a leaner media. Personal focus incorporates a few or many of the informational cues and requires some type of feedback. Non-personal focused type messages are often disregarded or result in very slow feedback.

Daft and Lengel's media richness theory was based on research done during the 1970s and 1980s. With the advent of new communication media such as personal computers in the 1980s and 1990's, there existed an opportunity to re-visit the media richness theory. El-Shinnawy and Markus (1996) determined the validity of the media richness theory with respect to "people's patterns of choosing among and using alternative media" (El-Shinnawy & Markus, 1997, p. 462).

They looked at the ability for a message to be uncertain or equivocal in nature, and what communication medium would the individual prefer: e-mail or voice mail. Daft and Lengel's media richness theory would state a message that could be perceived as uncertain or equivocal should be transmitted using a very rich medium such as video-teleconferencing or face-to-face to ensure the elements of feedback, cues, personal focus, and natural language are present.

El-Shinnawy and Markus (1997) were able to show that in the age of new electronic media, the results only partially supported the media richness theory. Based on their study results, individuals preferred email to voice mail with respect to uncertainty and equivocality in the message. The study did not support that prediction and many of the respondents felt that vocal cues introduced noise into the message and that email

conveys the true meaning of the message by eliminating the noise (El-Shinnawy & Markus, 1997). The study did support the media richness theory on the prediction that messages which are uncertain in nature could use a leaner medium such as email. Respondents in the study felt that email was more capable in producing an accurate message when the volume of information to be exchanged was large and quantitative in nature and both sender and receiver could encode and decode the message more efficiently (El-Shinnawy & Markus, 1997).

There were three explanations that El-Shinnawy and Markus (1997) provide as to why the media richness theory may be deficient in certain medium choices. The first explanation is based on the four elements in Daft and Lengel's media richness theory: feedback, cues, personal focus, and natural language. The combination of these four elements in unexpected ways is unique to the new communication era. Email can have almost instantaneous feedback and is very quick in nature versus the leaner medium of writing a letter. The traditional media is not the same as the new media.

The second explanation that they provide is that individuals can value different factors of media richness. They describe the fact that many participants in the study prefer the textual nature of email, the clear nature of the email, and the ability and ease to store and retrieve the email at a later date. These factors make the email communication valuable for complex tasks and its referential value.

The final explanation they provide is based on the fact that the media richness theory assumes both parties engage in communication equally whereas new media does not necessarily follow that construct. El-Shinnawy and Markus (1997) view that communicators will prefer certain media choices based on their role as a primary receiver or primary sender.

Dennis and Kinney (1998) supported a similar premise with respect to the perceived benefit of media richness matched to task equivocality. They conclude that the media richness theory is applicable for older media, but not necessarily for the newer media that is richer in feedback and cues (Dennis & Kinney, 1998).

As new media choices continued to expand, another theory emerged that continued to build on the media richness theory to compensate for the new electronic communication era. The media naturalness theory, developed by Ned Kock in 2002 (Figure 14), is based on the communication medium from an evolutionary standpoint. Through a biological evolutionary process, face-to-face communication is the most natural, and as the communication medium decreases from its natural state, it causes a mismatch between the biological communication apparatus and communication media characteristics (Kock, 2005).

Email, internet chat, video-conferencing etc   Super-rich virtual reality media

Decrease in naturalness   Decrease in naturalness

Face-to-face medium
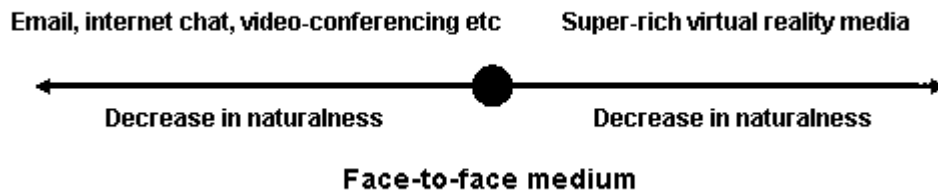
Figure 14.   Media Naturalness Theory Model (from Kock, 2002)

In contrast to the media richness theory, the media naturalness theory describes a process that is more compatible in the new electronic communication age. Kock's media naturalness theory delineates a process by which the individual can overcome a lack of fact to face interaction through its dependent constructs.

Kock (2002) focused on five elements of natural communication and three dependent constructs that are activated once one or more of the elements are removed. The five elements are: high degree of co-location, high degree of synchronicity, ability to convey and observe facial expressions and body language, and the ability to convey and listen to speech. The suppression of any combination of these elements leads to decreased naturalness and initiates a response through the media naturalness theory dependent constructs: cognitive effort, communication ambiguity, and physiological arousal.

The first of the five elements that Kock defines is co-location. Co-location is the individual's ability to see and hear another individual. This element allows for the

individuals to communicate under the same environmental factors such as temperature, physical location, and ambient noise allowing for heuristic cues towards to the context of the communication.

Synchronicity is the ability of the individuals engaged in communication to provide and exchange feedback through various stimuli. The verbal and non-verbal elements can invoke various thoughts, feelings, and responses for the individuals involved.

The individuals' ability to transmit and observe various facial expressions, body language movements, and speech tones gives context to the communicating individuals. There are mental and physiological responses to various verbal and non-verbal cues that result from face to face interaction.

If one or more of these elements are removed, then the dependent constructs are used to compensate for the lack of naturalness. Cognitive effort is based on the human's ability to create new pathways or circuits based on learned experiences to enable effective communication. Face-to-face interaction is considered natural because it has the five elements of natural communication and would follow the natural circuitry; however, if one or more of the five elements is suppressed, cognitive effort if engaged to create these new pathways. These newly created circuits are based on learning experiences and therefore can differ from person to person making the encoding and decoding of the communication process difficult and time consuming. Kock refers to this process as "fluency," and defines it as "the amount of time taken to convey a certain number of words through different communication media, which is assumed to correlate (and serve as a surrogate of) the amount of time taken to convey a certain number of ideas through different media" (Kock, 2005, p. 122). Research conducted by Kock showed that a decrease in media naturalness resulted in an increased cognitive effort and that on average, fluency was 18 times higher in face to face communication instead of email for complex group tasks (Kock, 1998).

Another dependent construct is communication ambiguity. This is based on the individuals learned schema. Each individual is influenced by different experiences

throughout their lives creating schemas. In the absence of certain information in a communication setting, the individual will rely on those schemas to fill in the gap. This construct allows the individual to interpret the communication message in the absence of information. When various media naturalness theory elements are suppressed due to various forms of non-face-to-face communication (i.e., email, video teleconferencing, etc.) informational gaps are filled by these schemas. Since each individual has unique life experiences and creates their own unique schemas, it increases the chances that the message will be misinterpreted causing communication ambiguity.

Kock (2005) describes the physiological arousal construct as the human communication apparatus reaction to stimuli or media naturalness theory elements. Human evolution has pre-conditioned an individuals' response to various stimuli such as facial expressions, body language, tonality, gestures, and other verbal non-verbal cues. The suppression of one or more of the media naturalness theory elements lowers physiological arousal and consequently makes the communication process less interesting. Communications that are complex and of high importance tends to be done face to face versus other media choices to ensure there is physical arousal to allow for increased emotional connection to the message.

D.   STUDY FRAMEWORK

The study framework (Figure 15) was designed around the theories mentioned above in the literature review. The vertical axis labeled "Media Fit" incorporates both media richness theory and media naturalness theory. The media richness theory describes richness of media on a linear scale suggesting that the most simple of tasks can be done with the leanest media, while the most complex tasks can be better accomplished through the richest media, face-to-face communication. The media naturalness theory compensates for the shortcomings of the media richness theory when applied to an ever-changing electronic communication world. Although the media naturalness theory asserts that the face-to-face communication is the most desired based on human evolution, its' dependent constructs (cognitive effort, communication ambiguity, and physiological arousal) suggest that effective media choice can be more flexible

31

depending on an individual's learned communication experience. Both media naturalness theory and media richness theory focus on face-to-face communication as paramount for complex messages to ensure proper decoding and encoding. Low media fit results when the media choice is not appropriate for the type of communication. Unsuccessful results can occur when the media choice is too lean given the complexity of the message resulting in low fit or when media choice diverges from the natural form of communication (face-to-face) and other dependent constructs needed to compensate for the unnaturalness are lacking. A high media fit occurs when the correct media choice is used for the intended messages.
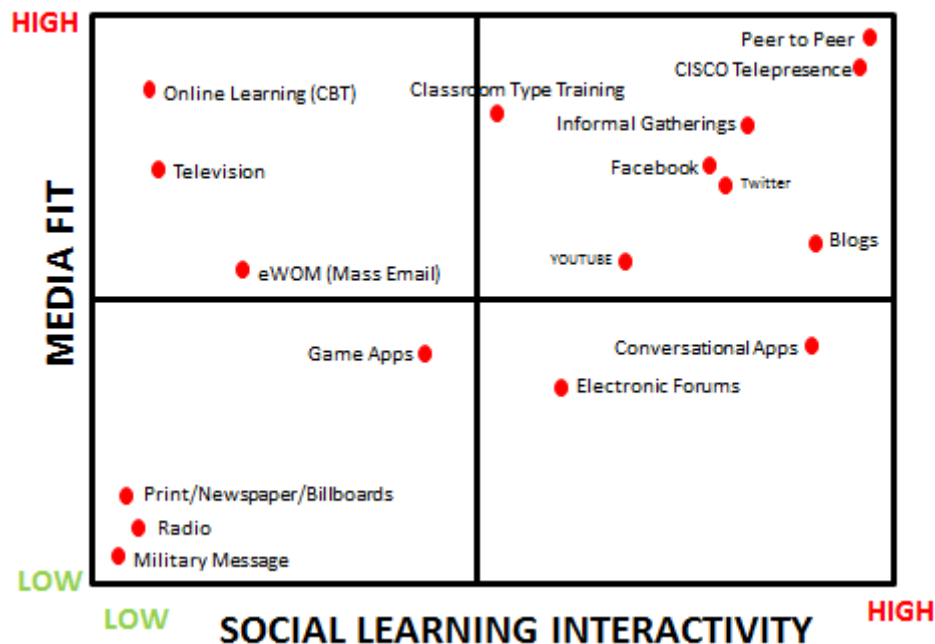
Figure 15.   Study Framework

The horizontal axis is based on aspects of Bandura's social learning theory observational modeling and reciprocal determinism. Individuals learn through attending, retaining, reproducing, and reinforcement. The observational learning process will help the individual develop the skills and self-efficacy to self-regulate their behavior; however, environmental factors and cognitive factors can either be influenced by their

32

learned behavior, or influence their behavior. Social learning interactivity adds an additional complexity to our framework. Operating in the social media and electronic communication paradigm allows for not only social interaction (immediate feedback) between two individuals to many, but unintentional learning and collaboration as well. A low social learning interactivity suggests the media choice does not allow for collaboration, unintentional learning, or immediate feedback. A high social learning interactivity encourages the aforementioned qualities. High social learning interactivity should result in a clearer message encoding and decoding process, as well as advocating social conversation regarding the subject matter.

This framework allows potential media to be positioned along the horizontal or vertical axis dependent on the situation. For instance, classroom type training can be an appropriate media fit depending on the complexity of the intended communication and the need for rich or natural media. If the media is too rich, then in theory, it could slide vertically from a more natural or richer media to a less natural or less rich media. With respect to the Social Learning Interactivity axis, if a social media platform was used (i.e., Facebook, Blogs, Forums, etc.) and it becomes a one-way communication method, it could slide from high to low.

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IV.   METHODS

A.   OVERVIEW

This study builds theory and derives recommendations by analyzing case studies using Eisenhardt's comparative case analytical process (1989). This process, depicted in Figure 16, includes the analysis of qualitative or quantitative data obtained from selected case studies. The cases chosen for this study provide tangible examples of organizations' use of different types of social media to influence behavioral change.

Step	Activity	Reason
Getting Started	Definition of research question	Focuses efforts
	Possibly a priori constructs	Provides better grounding of construct measures
	Neither theory nor hypotheses	Retains theoretical flexibility
Selecting Cases	Specified population	Constrains extraneous variation and sharpens external validity
	Theoretical, not random, sampling	Focuses efforts on theoretically useful cases—i.e., those that replicate or extend theory by filling conceptual categories
Crafting Instruments and Protocols	Multiple data collection methods	Strengthens grounding of theory by triangulation of evidence
	Qualitative and quantitative data combined	Synergistic view of evidence
	Multiple investigators	Fosters divergent perspectives and strengthens grounding
Entering the Field	Overlap data collection and analysis, including field notes	Speeds analyses and reveals helpful adjustments to data collection
	Flexible and opportunistic data collection methods	Allows investigators to take advantage of emergent themes and unique case features
Analyzing Data	Within-case analysis	Gains familiarity with data and preliminary theory generation
	Cross-case pattern search using divergent techniques	Forces investigators to look beyond initial impressions and see evidence thru multiple lenses
Shaping Hypotheses	Iterative tabulation of evidence for each construct	Sharpens construct definition, validity, and measurability
	Replication, not sampling, logic across cases	Confirms, extends, and sharpens theory
	Search evidence for "why" behind relationships	Builds internal validity
Enfolding Literature	Comparison with conflicting literature	Builds internal validity, raises theoretical level, and sharpens construct definitions
	Comparison with similar literature	Sharpens generalizability, improves construct definition, and raises theoretical level
Reaching Closure	Theoretical saturation when possible	Ends process when marginal improvement becomes small

Figure 16.   Process of Building Theory from Case Study Research
(from Eisenhardt, 1989)

Eisenhardt (1989) suggests that analyzing within-case data is the heart of building theory from case studies. Within-case analysis entails organizing concepts and ideas from individual detailed case write-ups and processing the information to identify unique patterns within each case. This provides a thorough understanding of each case and facilitates cross-case analysis and comparison.

Cross-case analysis is the process of comparing the within-case analyses to identify patterns by comparing the data across multiple dimensions. Eisenhardt (1989) provided an example of cross-case analysis in strategic decision, categorizing and then comparing the cases across the categories (e.g., founder-run vs. professional management companies, or large vs. small size). While some categories provided no clear patterns, other important patterns of within-group similarity and across-group differences were discovered. The cross-case analysis is designed to force researchers to think beyond initial impressions and view data through multiple lenses. The intent is to improve the probability that theory and data are closely aligned.

B. CASE SELECTION

1. Selection Criteria

In order to effectively explore whether investing in social media would be an effective means to influence USMC behaviors towards achieving the CMC's energy mission, a wide selection of case studies is necessary to provide a logical recommendation.

The cases selected for this study vary on factors such as organization structure/culture, program goal, program audience, media use, and outcome. Specific categories were identified to provide diverse scenarios where social media played a role in shaping behavior. Cases were selected within the categories, and to maximize variance, as listed below:

- Medium for transmission
  - Legacy/Old Technology
  - Modern/New Technology
- Outcome of implementation

- Successful
- Unsuccessful

- Type of organization
  - Government/State
  - Public/For-profit

- Audience
  - External/Customers
  - Internal/Employees

The cases chosen to represent the dimensions listed above will be analyzed in the following chapter.

2. Data Sources

Case studies were collected from archival data including teaching cases, cases used as data in academic studies, company websites and press releases, and reports in news media. Whenever possible, amplifying data was obtained from multiple sources to strengthen case study findings. A summary of the data sources utilized in the case selection is listed in Table 1.

Case Name	Dimension	Data Sources
Flex Your Power Campaign	Government/State	Case studies, utility company website
CISCO Product Launch	Public/For-profit	Company website, social media websites, press releases
Stanford Three Community Study	Legacy/Old Technology	Medical journals, case studies, medical library archives
How the Presidential Candidates Use the Web and Social Media	Modern/New Technology	Case studies
Starbucks	Successful	Press releases, case studies, company social media platforms
Tekcompany (TEKCO)	Unsuccessful	Case studies, press releases
Dell	External Audience	Case studies, company website
Tupperware Nordic	Internal Audience	Case studies, company website, press releases

Table 1.   Case Study Data Sources

3.   Analysis Approach

Individual case studies were selected to represent the categories and dimensions listed in the section above. Adopting Eisenhardt's (1989) comparative case analysis

approach, we identified themes, events, strategies, drivers, barriers and outcomes in each case and evaluated qualitative data utilizing within-case analysis. We then examined findings from each of the within-case analyses to identify patterns, similarities and differences between the cases. The lessons learned from the case studies were evaluated to provide suggestions to the Marine Corps in executing an effective social media campaign. The analysis was driven by questions such as the following: What were the influencers of successful social media campaigns? Could the types of social media presented in these case studies be effective in shaping Marine behaviors towards maximizing energy efficiency and reducing consumption? The themes of successful social media campaigns will be addressed in the within-case analyses and the cross-case analysis. The possibility of social media used to effectively shape behaviors will be addressed in the implication section.

The cross-case analysis compared and contrasted internal versus external communications, successful versus unsuccessful social media campaigns, new versus legacy communication methods, and government versus commercial institutions. Key themes such as successful characteristics and factors that drive the outcomes were evaluated using our study framework analysis. The lens for evaluating the case studies incorporated behavior and communication models such as Bandura's social learning theory (1977) and social cognitive theory (1978), Daft and Lengel's media richness theory (1983), and Kock's media naturalness theory (2002). The study framework analysis determined if social media, as a business communication medium, has the potential to encourage behavioral change within an organization and effectively communicate message content. The results of the analysis follow in the next chapter.

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V. ANALYSIS & FINDINGS

A. INTRODUCTION

The data for this research were collected from cases used in academic studies, information from company websites, and press releases. The cases selected provide a diverse group of scenarios for an expansive comparison.

A within-case analysis identified the underlying circumstances each organization faced and how they anticipated social media might promote desired behavioral change. Background information along with the methods employed during the social media campaign is provided with a summary of the outcome. Additionally, we will observe the cases through the lens of the study framework to determine media fit and social learning interactivity.

This chapter discusses the within-case analyses conducted for each of the case studies chosen to determine themes, events, strategies, drivers, barriers and outcomes. These elements identified in the within-case analyses were then compared with other case studies in a cross-case analysis to distinguish recurring themes in successful social media campaigns.

B. WITHIN-CASE ANALYSIS

Eight cases were studied to compare the effectiveness of social media within their organizations. The following within-case analyses were performed with the observations listed below.

1. Stanford Three Community Study

a. Background

In 1973, the Stanford Heart Disease Prevention Program (SHDPP) and the Department of Medicine at Stanford University launched a two-year, bilingual mass media health education campaign designed to reduce cardiovascular disease (CVD). The campaign was carried out in two communities (Watsonville, CA and Gilroy, CA) with a

third community (Tracy, CA) serving as a control. An additional "maintenance year" of reduced effort followed (Fortmann, Williams, Hulley, Haskell, & Farquhar, 1981).

b.   *Method*

The three northern California communities selected for the study were "semirural market towns with economies centered largely around agriculture and with 1970 populations between 13,000 and 15,000" (Fortmann, Williams, Hulley, Maccoby, & Farquhar, 1982, p. 77). In each community, a sample of men and women residents 35 – 59 years old were invited to participate in a baseline health survey during the fall of 1972. The survey "included interviews about CVD-related knowledge, attitudes and behavior, and measurements of blood pressure, relative weight and blood lipids" (Fortmann et al., 1982, p. 77). Baseline scores were established for each participant according to the information provided on the surveys.

The mass media campaign was started in January 1973 and continued through the summer of 1975. The campaign "was bilingual (English and Spanish) and delivered through various media, including television, radio, newspapers, and billboards. Pamphlets, cookbooks, and other informational items were distributed by direct mail to the base-line survey participants" (Fortmann et al., 1981, p. 2031). The participants in Gilroy received the mass media only without any personal counseling from health professionals. Two-thirds of the Watsonville participants were selected for special treatment called "intensive instruction" while the remaining one-third of the Watsonville sample received mass-media treatment only, similar to the participants in the Gilroy community. The "intensive instruction" group received "an initial interview with a physician who explained their risk status to them and set specific targets for health habit changes, and nine follow-on counseling sessions which varied in length from 1½ to 3½ hours" (Stern, Farquhar, Maccoby, & Russell, 1976, p. 827). Upon conclusion of the study, the participant's health was compared to the baseline established during the initial survey.

c. Outcome

Both intensive instruction and mass-media campaigns led to significant reductions (20 – 40%) in cholesterol and saturated fat consumption in both men and women, with the "intensively instructed" group tending to outperform the participants exposed to mass-media alone (Stern et al., 1976). Within the two communities that received the mass media campaign, declines in dietary cholesterol and saturated fat intake were uniformly larger than in the control community (Fortmann et al., 1981). The results "indicate that the mass-media health education campaigns can lead to significant changes in dietary practices in the general population with potentially important public health implications" (Stern et al., 1976, p. 826). Additionally, "the results presented offer encouragement that large groups of people are able to apply information on health and behavior obtained from mass media to make changes in dietary practices and obesity" (Fortmann et al., 1981, p. 2037).

Communities solely exposed to mass-media demonstrated desired behavioral change. However, communities that were exposed to the mass-media campaign and peer-to-peer involvement (dietician or physician counseling) showed the largest improvement (Bowes, 1997). It was noted that "intensive instructees performed significantly better than individuals exposed to mass media alone in improving their overall health, suggesting improved communication of the more subtle dietary message in the personal interaction setting" (Stern et al., 1976, p. 832).

In the years following the Stanford Three Community study, the SHDPP developed the "Health Communication – Behavior Change Model" shown in Figure 17, below.

Communication Inputs	Communication Functions (for the Sender)	Behavior Objectives (for the Receiver)
Media messages	gain attention	become aware
	provide information	increase knowledge
Face-to-face	provide incentives	increase motivation
communication	provide models	learn and practice skills
Community events	provide training	take action, assess outcomes
	provide cues to action	maintain action, practice self-management skills
	provide support, self-management skills	influence social network members

Figure 17.   The Health Communication – Behavior Change Model
(from Farquhar, Maccoby, & Solomon, 1984)

The SHDPP concluded that influencing some behavioral changes, such as smoking cession, "seemed to *require* the social support and face-to-face interventions" (Bowes, 1997, The Stanford Three Community Study section, para. 2).   Given the success in influencing behavioral change with the *Stanford Three Community Study*, the SHDPP conducted a follow-on campaign titled *The Stanford Five City Project* aimed at reducing risk factors for heart disease. This campaign also produced improvements in cardiovascular health through "communication, health education, behavior change, and community organization" (Farquhar et al., 1985, para. 1).

d.   Study Framework Analysis

The Stanford Three Community Study demonstrated that the best forum to achieve the complex task of improving cardiovascular health was peer-to-peer interaction.   Implementing and sustaining life-style changing behavior required the richest media available to realize the optimum results.

The constant exposure to the media campaign in the forms of radio, television, billboards, and newspapers also produced improvements in behavioral change. Although these forms of media are not as rich as peer-to-peer interaction, they still played a significant role in social learning. This theme is clearly evidenced in the community that improved cardiovascular health by exposure to the social media alone.

The Stanford Three Community Study also utilized the most up-to-date forms of social media available to them to ensure that they achieved the widest distribution possible. The repetition and constant exposure to the material in diverse audio and visual formats enhanced the participants' social learning during the campaign.

The campaign effectively utilized the mediums available to them to reach different demographic segments of the population also. For example, the campaign removed the language barriers to learning by providing media materials in Spanish to predominately Hispanic communities. This careful targeting of their audience ensured that the intent of the message was received properly.

2.   Flex Your Power Campaign

a.   *Background*

In summer of 2000, electricity in California became a topic of public concern. Facing an inability to meet peak power demand, California policymakers launched a multi-million dollar social media campaign called Flex Your Power aimed at getting customers and businesses to take energy-saving actions. The Flex Your Power campaign was named as a means to get "residents and business leaders to understand that energy conservation was really in their hands" (McGuire, 2006, Getting Informed section, para. 3). The initial goal for summer 2001 was to reduce the previous year's electricity consumption by 5,000 megawatts and to "make energy conservation, including energy efficiency, a way of life" (McGuire, 2006, Setting Objectives section).

b.   *Method*

The 2001 Flex Your Power campaign targeted two key approaches to reduce electricity consumption: conservation and load-shifting (McGuire, n.d.). The mass media campaign "focused on the immediate objective of reducing both overall consumption and peak demand by percent compared to the same month in the previous year and by getting consumers to voluntarily add to their repertoire of conservation behaviors" (Bender, Moezzi, Gossard, & Lutzenhiser, 2002, p. 8.17). The objective campaign designers hoped to achieve was "changing consumer behavior and getting California conserving by

creating the image that conservation is smart and simple to do and, ultimately, allows for a better life for all Californians" (Bender et al., 2002, p. 8.17).

Mr. Walter McGuire, the principal creator and manager of the Flex Your Power campaign describes his strategy for targeting the correct audience:

> Very early on, we decided what became known as the 'CIGAR' strategy. The 'C' is commercial; 'I' is industrial; 'G' is governmental; 'A' is agriculture; 'R' is residential. We focused on influencers, the key messengers in each of those sectors. There are many measures that people could take, but we basically selected about two or three within each sector and put all of our concentration on them. (McGuire, 2006, Targeting the Audience section)

The campaign managers utilized numerous mediums to "educate Californians on the energy, financial and environmental benefits of energy efficiency" (Southern California Edison, Program Statement section, para. 2). The campaign provided a "full and synergistic range of marketing and outreach strategies including television; radio and newspaper ads; earned media; printed educational materials; events; a website resource; and cooperative marketing and outreach efforts with business, government and nonprofit organizations" (Southern California Edison, Program Statement section, para. 2).

Specific examples of the targeted media campaign include translating television and radio advertisements into Cantonese, Korean, and Vietnamese in Asian communities. The case research noted early on "that most Asians did not feel that they were wasting energy and paid little attention to public announcements unless they were directly affected" (Bender et al., 2002, p. 8.18). The Flex Your Power campaign strategists targeted the Asian communities to "deliver a pragmatic, direct message to communicate clear personal benefits" (Bender et al., 2002, p. 8.18). These "Asian-related visuals, such as chopsticks, were also incorporated into print messages to attract attention" (Bender et al., 2002, p. 8.18).

Another example of the effectiveness of the social media campaign was observed through elementary schools in California. Homework was issued to fourth, fifth, and sixth graders to calculate their family's wasted energy. The student's parents were asked to sign the homework assignments, which essentially led to parents becoming more

educated on the energy conservation topics their children discussed in school (McGuire, 2006, Delivering the Program section, para. 7).

c. Outcome

The combined conservation and efficiency programs reduced peak electricity demand by an estimated 6,369 megawatts (Bender et al., 2002, p. 8.16). Over the course of 2001, Californians, on average, reduced their peak demand by 8.9% and their energy consumption by 6.7% (Bender et al., 2002, p. 8.25). The lessons learned from 2001 Flex Your Power Campaign (Southern California Edison, Program Statement section, para. 5) are listed below:

- *Continuity in marketing research and outreach*. To be effective, statewide marketing and outreach programs need long-term planning cycles to build and maintain lasting relationships, cost-effectively take advantage of mass media strategies and leverage additional public and private resources to make the most of the limited funding available.

- *Constant information*. Consumers must have constant and consistent messages to take action.

- *Compelling information*. To effectively communicate to consumers through mass media, the internet and other forms, the messages conveyed must be clear, compelling and concise.

- *Consistency and coordination across the state*. In order to avoid confusing customers and amply compelling messages, California should coordinate messages and timing with the myriad of programs offered by program providers in the state.

- *Leverage resources to promote energy efficiency*. Given their limited funding, energy efficiency marketing and outreach programs need to leverage private sector and other resources.

California applied these lessons learned and continued to refine energy conservation efforts by adapting the newest forms of social media. Currently, a demand response program operated by the California Energy Conservation Network provides Flex Alerts. The Flex Alerts effort has since replaced the Flex Your Power Campaign and provides California residents with energy saving tips via the latest forms of social media. The Flex Alert website is available in multiple languages and provides consumers the options to receive information through phone texts, emails, as well as notifications through Facebook and Twitter.

d. *Study Framework Analysis*

California residents felt they were empowered to take decisive action in reducing energy consumption. Cognitive factors such as knowledge, expectations, and attitudes were clearly enhanced through audio, print, and visual mediums. The social media campaign informed residents that individuals could make a difference and that making a more conscious energy conservation effort was easy to accomplish. The repetition of television commercials and print newspaper ads facilitated observational learning and enforced the behavioral skills necessary to reduce energy consumption. The commercial themes illustrated simple, energy conserving tasks such as adjusting a thermostat, turning off lamps, and using energy efficient light bulbs.

The campaign effectively targeted diverse audiences and enabled positive behavioral change to happen with desired outcomes. By tapping into the learned schemas and personal experiences of the varied demographic groups, individuals received messages tailored to their ethnic backgrounds and unique lifestyles. As a result, the messages were understood by the intended recipients.

Additionally, the California energy conservation movement managed to keep current with the advances in social media. The diverse channels of communication reach across numerous demographics to share information and promote social learning.

3. Tupperware Nordic

a. *Background*

Tupperware Nordic is the northern European branch of Tupperware, the plastic container manufacturer. The Tupperware Nordic headquarters was established in Copenhagen, Denmark in 1962. This branch of Tupperware services markets in Sweden, Denmark, Norway, Finland, and Iceland. In 1996, Tupperware Nordic also began servicing the Baltic markets located in Estonia, Latvia, and Lithuania. The Tupperware Nordic organization consists of 16,000 consultants and team leaders who operate from 48 distribution centers and warehouses across the Nordic region (Tupperware Nordic & Baltic, n.d.).

Stein Ove Fenne assumed the responsibilities of marketing director for Tupperware Nordic in October 2001. Fenne "inherited a system with a very high power distance between the headquarters in Copenhagen, Denmark and the rest of the organization" (Huy & Shipilov, 2012a, p. 76). Improving the working relationships between the distributors and sales consultants and the headquarters office was the first priority under Fenne's leadership. His physical actions towards his employees coupled with his use of social media bridged the gap between upper management in Copenhagen and the sales staff throughout the Tupperware Nordic region.

b.   *Method*

Fenne realized that the distributors played a significant part in the Tupperware value chain and sought to establish personal relationships with the consultants and distributors. In addition to personally visiting their major centers of activity, he invited his distributors to the Tupperware headquarters on a regular basis. During these visits by distributors and sales personnel, he "literally rolled out a long red carpet for their arrivals as a symbol of appreciation" (Huy & Shipilov, 2012b, para. 6). The egalitarian Scandinavian business culture typically frowned on this type of behavior. As a result of Fenne's unusually kind gestures, his distributors were flattered by their treatment and naturally enjoyed their visit to the Copenhagen headquarters. The experiences were discussed extensively in physical and virtual conversations amongst Tupperware Nordic employees.

Fenne sought to use social media as a way "to reinforce employees' positive feelings about the company, their colleagues, and their jobs" (Huy & Shipilov, 2012b, para. 5). His numerous communications with employees included podcasts, emails, and blogs which illustrated how the company valued the consultants' and distributors' contributions. Fenne "personally read all communication sent to him by the consultants" (Huy & Shipilov, 2012a, p. 77). To reduce the amount of time responding, Fenne would answer with one-line responses such as "Wow! We are proud of you!" and would add the person's name. These responses did not take long to type, but "made the consultants feel appreciated for their achievements" (Huy & Shipilov, 2012a, p. 77). Additionally, Fenne

utilized Facebook's "Like" option as a way to acknowledge the efforts of his consultants. He observed that "liking" and one-line responses were effective ways to increase his consultants' motivation to excel in their work and could be accomplished daily in less than 15 minutes (Huy & Shipilov, 2012a). Because Fenne's messages "were confirmed by his behavior in the physical world (such as personal visits and red-carpet receptions), consultants perceived Fenne to be an authentic leader and were willing to join social media communities that he created" (Huy & Shipilov, 2012a, p. 77).

c.   *Outcome*

Tupperware Nordic "invested less than $50,000 in social media initiatives" (Huy & Shipilov, 2012a, p. 75). However, the social media campaign designed to bring upper management closer in Copenhagen closer to the sales workforce throughout the Nordic region proved largely successful. One benefit observed was a 15% decrease in the turnover rate of Tupperware sales consultants.

A "Tupperware Radio Show" was also established by Fenne as a method for sales consultants in the Nordic region to participate and post live comments on Facebook, which he personally responded. The "Tupperware Radio Shows" were essentially "webcasts from Fenne's office where he and his staff played the role of talk show hosts" (Huy & Shipilov, 2012a, p. 78). The results of this initiative were impressive: one such show "generated €500,000 of new sales over a three-day weekend in January 2010 with only €6,000 investment in telecommunications bandwidth" (Lee, 2012, para. 8).

Fenne successfully used social media to build emotional capital within his employees. His efforts resulted in "increased information flows, collaboration, lower turnover, and higher employee motivation" (Huy & Shipilov, 2012a, p. 74). As a result of his effective leadership style and use of social media to improve operations during his four years at Tupperware Nordic, Stein Ove Fenne was promoted to President, Tupperware United States and Canada.

d.   ***Study Framework Analysis***

Given the complexity of the Fenne's challenge to bridge the gap between sales consultants and the headquarters staff in Copenhagen, Fenne began with the richest form of media: peer-to-peer communication. This immediately facilitated collaboration, unintentional learning, and immediate feedback. The follow-on social media platforms employed by Tupperware Nordic also facilitated high social learning interactivity.   This resulted in a clear message decoding process, as well as advocating social conversation regarding the subject matter.

The clear message and authenticity of Fenne's actions through social media were in keeping with Fenne's actions in person. Fenne stated: "Social media is an extension of who I am. On Facebook, which is the main platform for communicating with consultants, I am Stein Ove – the private person, I am not Tupperware. I have my private inspirations, thoughts, and pictures. This builds authenticity and helps consultants feel that the person they see on Facebook is real" (Lee, 2012, para. 3).

Tupperware Nordic's application of other social media platforms, such as the "Tupperware Radio Show" webcasts, was high in media fit also and led to enhanced social learning.

4.   Tekcompany (TEKCO)

a.   Background

TEKCO (the company's real name is disguised to preserve confidentiality) is a technology company that invested heavily in social media for internal use. Upon learning about the success of social media within other organizations, TEKCO executives agreed to establish a social media platform for their company. Upper management at TEKCO hoped the social media initiative would "flatten their organization and improve cross-unit communications" (Huy & Shipilov, 2012a, p. 76).

b.   Method

The senior leadership at TEKCO "mobilized experts to develop internal applications that mirrored the functionality of Facebook and Twitter and built a platform

that allowed for the creation of internal wiki packages" (Huy & Shipilov, 2012a, p. 74). As part of the design effort, TEKCO "hired many open-source technology developers to build new collaboration tools" (Huy & Shipilov, 2012b, para. 2).

The social media platform created by TEKCO enabled the employees to partner and share ideas. Its social networking applications, for example, "allowed employees to identify other people who could write in the same programming languages" (Huy & Shipilov, 2012a, p. 78). In order to avoid unauthorized information leakage, the company decided to stay away from Facebook and other publicly used forms of social media. Lastly, TEKCO enforced mandatory "participation in the internal social media communities as a part of the employees' performance review" (Huy & Shipilov, 2012a, p. 74).

c.   Outcome

TEKCO executives could not easily identify any tangible benefits that resulted from their social media implementation. The social media adoption by TEKCO "improved neither the ease of internal information sharing nor employee morale. Even operation efficiency was unaffected" (Huy & Shipilov, 2012a, p. 75).

TEKCO "followed an implementation approach that reflected a traditional information technology mindset" (Huy & Shipilov, 2012a, p. 75). Executives at TEKCO exclaimed that technological aspects (such as the ease of use and availability of social media tools) account for the success or failure of social media communities (Huy & Shipilov, 2012a). Emotions or employee perceptions of the company leadership were not considered. For example, "employees at TEKCO greeted with cynicism the senior executives' blog posts and podcasts about the importance of community spirit, because the same executives had previously engaged in a massive restructuring that involved layoffs" (Huy & Shipilov, 2012b, para. 6).

Executives at TEKCO delegated the task of responding to employee ideas to their assistants. These same assistants "were also in charge of managing comments on the blogs, enabling them to respond as they deemed fit" (Lee, 2012, para. 7). Once

employees learned that they were communicating with assistants instead of the executive staff, distrust about the social media initiatives set in among employees.

The required use of internal wikis for knowledge sharing as part of the employees' performance appraisal led to posts with questionable content and quality. Many employees contributed to the company's social media communities only to satisfy company mandates. As a result of the significant investment and minimal benefits realized, TEKCO abandoned their social media efforts.

d. Study Framework Analysis

The TEKCO case provides an example where social media platforms were custom tailored to facilitate information sharing and internal collaboration amongst management and employees. While these forms of social media were high on the scale of media fit, little social learning and interactivity transpired. Due to TEKCO's rigid hierarchical structure, peer-to-peer interactions between upper management and subordinate employees were almost non-existent. The TEKCO leadership's physical actions were not in keeping with their actions observed through social media platforms. This led to unwillingness by subordinates to adopt the newly created social media platforms.

The communication via the social media platforms essentially became a one-way avenue for communication. Upon learning that upper management was not reading the comments submitted TEKCO employees essentially stopped applying effort to the social media platforms. Additionally, the assistants that TEKCO executives delegated to respond to employees could delete or alter posts as they desired. This defeated the intent of sharing information and new ideas.

5. CISCO ASR 1000 Launch

a. Background

Traditional product launches such as the launch of CISCO's Carrier Routing System (CRS-1) had many drawbacks: increased cost due to flying in key people for the event; lost productivity of company executives, environmental impact of travel; limited to

only one physical location resulting in smaller audience participation due to time and distance constraints; limited audience feedback (Suckow, 2010). Trends towards "new communication channels such as blogs and other social media" also made traditional product launches less effective (Suckow, 2010, p. 3). Print ads and direct postal mailings were no longer generating as much awareness for their products. In an effort to reduce costs for both the company and its audience, to increase engagement with the audience, and to attract a wider audience, CISCO decided to try a completely virtual launch of its Aggregation Services Routers (ASR) 1000 Series.

b. *Method*

The virtual launch presented CISCO with numerous advantages over the traditional launch. It "enabled anyone in the world with a web connection to join the launch event" (Suckow, 2010, p. 3). CISCO increased audience engagement by encouraging "audience interactions via text chat for question-and-answer sessions" (Suckow, 2010, p. 3) and seeking out dialogue with bloggers who could promote continued conversations about CISCO products. Facebook and other social media networking sites were also used to encourage discussion about the product. CISCO focused on building an audience several weeks in advance of the launch through interactive dialogue on CISCO.com, Facebook, Twitter, and YouTube (Suckow, 2010). They used widgets that allowed for easy syndication of CISCO videos, information, and images. Knowing that video games were popular amongst their target audience, CISCO released the 3D game "Edge Quest" that depicted the ASR as a vehicle used to defend a network. Those who scored the most points in the game were awarded an ASR plus $10,000 (See Figure 18).

Figure 18.   Edge Quest 3D Game (from Socialmediaexaminer.com, 2014)

In order to accommodate audience members stretched across several time zones, CISCO "launched the product" at four separate events scheduled at different times throughout the day in a scheme called "follow the sun" (Suckow, 2010, p. 6). Customers who were located thousands of miles away were brought into CISCO offices in San Jose using CISCO TelePresence, their next-generation video conferencing technology. TelePresence allows for communication and conversation "in real time, noticing every gesture, facial expression, and subtle voice inflection" (CISCO, n.d.).   The individuals on the screen were proportional in size, even sitting at the same type of furniture to give all participants the perception that everyone was in the same room together (See Figure 19).

Figure 19.   CISCO TelePresence (from CISCO, 2014)

c.   *Outcome*

La Sandra Brill, CISCO senior manager of global social media, was proud to report that the launch of the ASR was one of the top five launches in the company's history (Hibbard, 2010). Social media was used to start building the audience and to amplify the company message weeks before the event. The ASR event attracted 7,000 participants with 3,100 attending the actual live event versus an attendance of 1,625 for the CRS event. At a cost of $2.6 million for the ASR event, CISCO reduced product launch spending by 75% when compared to the $9.6 million spent on the CRS launch (Suckow, 2010, p. 5).   With around 245 articles written on the ASR, CISCO gained three times more press coverage versus the CRS (Suckow, 2010, p. 6). "More than 1,000 blog postings helped spread awareness" of the product (Suckow, 2010, p. 6). The virtual campaign generated a total of 40 million impressions for the company; an "impression" is a measure of the number of times an ad is seen, whether it is clicked on or not. Over 42,000 gallons of gas was estimated to have been saved since no person was needed to be flown to a physical location. Another important benefit of the virtual launch was its freedom from time constraints. He noted that "the launch no longer ends at the conclusion of our live program, but rather lives on through material available on our website and through our continues interaction via social media" (Suckow, 2010, p. 7).

	Traditional Event	Next-Generation Event	
Product	CRS-1	ASR 1000	ASR 9000
Date	May 2004	March 2008	Nov. 2008
Next-Generation Event Elements	Limited video (satellite), VoDs	Broadly available web video (On24), text Q&A, VoDs, Second Life, TelePresence	Web reveal (not live event), VoDs
Social Media Elements	NetPro (Cisco Community)	Facebook, Second Life, YouTube, Cisco blog, outreach to bloggers, interactive game	Facebook, Twitter, YouTube, Cisco blog, outreach to bloggers, addictive game, website for social media content
Physical Locales	1 main, 3 remote via satellite	0	0
Number of Sessions	1	4 (follow the sun)	0
Number of Attendees: - In-person attendees - Remote—web live - Remote—web reveal (registered) - Total	125 1,500 0 1,625	0 3,100 0 3,100	0 0 9,150 9,150
Print Advertising	Yes	No	No
Market Impact: - Traditional press articles - Total impressions (web and print)	87 -	245 40M	250+ 45M
Cost: - External expenditures - Internal resources - Total cost	$7.9M $1.7M $9.6M	$1.3M $1.3M $2.6M	$1.0M $1.3M $2.3M
- Cost/event attendee - Cost/1,000 impressions (CPM)	$5,926 -	$830 $64	$254 $52

Source: Cisco IBSG, 2010

Figure 20.   Comparison Between Traditional & Virtual Product Launch
(from Suckow, 2010)

d.   Study Framework Analysis

Through the use of social media, CISCO achieved a successful launch of its ASR. CISCO's shift from traditional to virtual launches reflects the current trend away from leaner media such as posters, billboards, and bulk mail and towards richer technology media. This launch showed the positive effect active and engaged discussion have on promoting the ideas of an organization to an external audience. It also showed that rich and natural media are key determinants in promoting that discussion. TelePresence provided users with body language, voice tonality, and facial expressions, making it the

57

richest and most natural of all the social media channels used by CISCO. Through Telepresence, potential customers for the ASR were able to be at CISCO headquarters in San Jose without physically being there. CISCO understood its audience and sought to increase interactivity with them by engaging them "where they were - in online venues and the gaming world" (Hibbard, 2010, p. 10). Recognizing that 17% to 18% of IT professionals play video games, CISCO chose a medium that was more receptive to them and pulled over 20,000 network engineers into playing the Edge Quest video game. The use of blogs and social networking sites provided a medium for timely feedback, shared opinions, answers to questions in a many-to-many conversation. CISCO made many correct choices in selecting media channels that were high in both media fit and social learning interactivity.

6.   2012 Presidential Campaign

a.   *Background*

In 2012, after one term in office as the United States President, Barack Obama faced the Republican presidential candidate, former Governor of Massachusetts Mitt Romney. Since making a serious impact during the 2004 presidential race when candidate Howard Dean used the web to generate early support and fundraising, social media was playing a more important role in campaigning. Social media's utility was more prominent in the 2008 campaign when then-Senator Obama was able to win a large number of younger voters through the use of the web. Taking lessons from the defeated campaign of Senator John McCain in 2008, the Romney campaign sought to "close the digital gap" between it and the Obama campaign (Rosenstiel & Mitchell, 2012). This case study will focus on how President Obama adjusted his 2008 social media campaign strategy to take advantage of new social media channels. This case will also include comparisons between the Obama campaign and the Romney campaign.

b.   *Method*

Both campaigns predominantly used social media as a means to get their talking points out to the voters. As such, each campaign's strategy was focused on the one-to-many capability of social media. Although the one-to-many capability is arguably not the

strength of social media, it was sufficient for the simple task of relaying a message to the largest possible audience.

The Obama campaign took greater advantage of the available social media channels in 2012 compared to the Romney campaign. The list of social media channels used by President Obama included Facebook, YouTube, Twitter, Google+, Pinterest, Tumblr, Flickr, Instagram, Spotify, and blogs (Pew Research Center, 2012, p. 5). Romney's campaign used Facebook, Twitter, YouTube, Flickr, and Google+. The social networking and microblogging service Twitter made its presidential election debut in 2012 with President Obama making more use of it than Governor Romney. In 2008, YouTube was used by the President Obama "to post longer videos than conventional political advertising" (Pew Research Center, 2012, p. 26). He continued his use of YouTube in 2012, posting on average two videos daily (Pew Research Center, 2012). The Romney campaign posted one video daily on average. The 2012 Obama campaign increased its effort at localizing social media messages to specific target audiences, groups, and locations compared to 2008. The Romney campaign did not customize content to specific groups and locations until June and, even then, the sites were found to be lacking in timely content (Pew Research Center, 2012). Both candidates used far less external and traditional media such as news stories on their sites. In 2008, external news stories often had links on campaign sites. In 2012, most news stories included on campaign sites were generated by the campaign themselves.
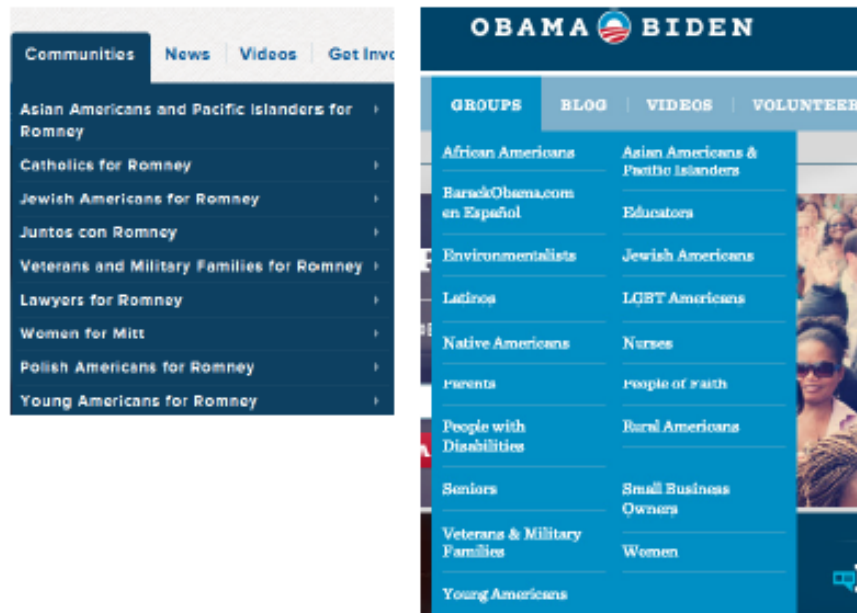
Figure 21.   President Obama's & Governor Romney's Websites
(from Pew Research Center, 2012)

c.   Outcome

The findings of the Pew Research Study show that the Obama campaign made much greater use of social media compared to the Romney campaign. Of course, the Obama campaign had the advantage over the Romney campaign having established a social media following four years earlier in 2008. Despite this early lead in the use of social media, Obama did not let up on the aggressive use of these platforms. On the opposing side, the Romney campaign found itself lagging significantly in its use of and recognition on social media. In 2012, the Obama campaign increased the number of social media channels that it communicated on with Twitter being the newest of its outlets.

Obama Leads Romney in Digital Activity...

Number of all digital posts studied
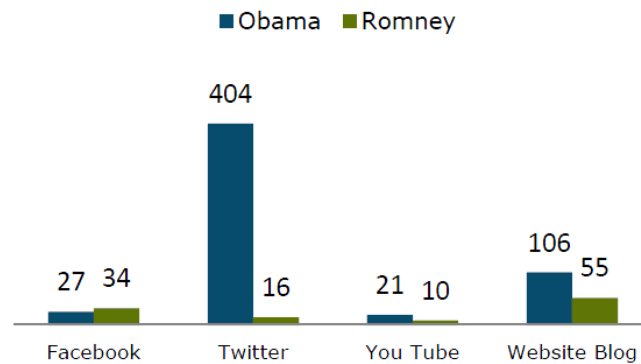
■ Obama ■ Romney

Facebook: Obama 27, Romney 34
Twitter: Obama 404, Romney 16
You Tube: Obama 21, Romney 10
Website Blog: Obama 106, Romney 55

Date Range: June 4-17, 2012

PEW RESEARCH CENTER'S PROJECT FOR EXCELLENCE IN JOURNALISM

Figure 22.   Obama Leads Romney in Digital Activity
(from Pew Research Center, 2012)

Started in 2008, Obama's Facebook page garnered over 27.6 million Facebook friends compared to 1.7 million in the previous election (Pew Research Center, 2012). One metric that is important when considering the effectiveness of social media in creating a buzz is the People Talking About This (PTAT) score measured by Facebook. Facebook determines this metric by tracking the number of unique users who have interacted with a specific page by doing such things as "liking" your page; "liking, commenting on, or sharing your page post; "tagging" your page in a photo; and checking in or recommending your place (Darwell, 2012). During the time period occurring before June 6, 2012, President Obama's PTAT score was four times that of Romney's (Pew Research Center, 2012, p. 26).

...and Social Media Response

Number of all digital posts studied
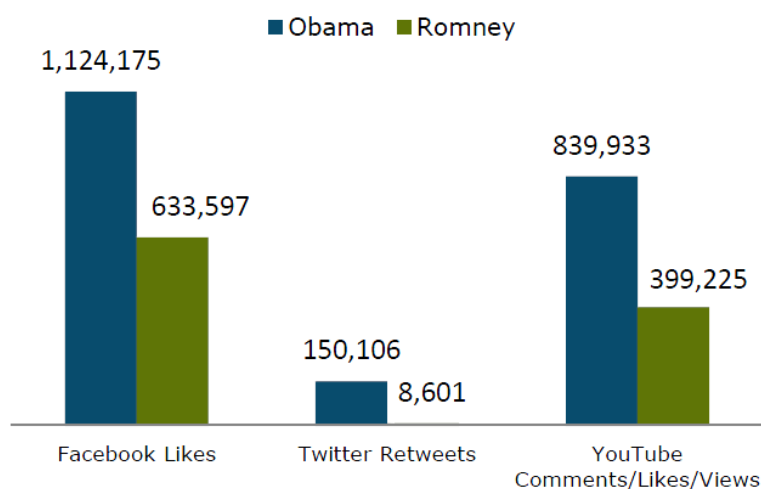
■ Obama ■ Romney

1,124,175

633,597

839,933

399,225

150,106

8,601

Facebook Likes   Twitter Retweets   YouTube
                                    Comments/Likes/Views

Date Range: June 4-17, 2012

PEW RESEARCH CENTER'S PROJECT FOR EXCELLENCE IN JOURNALISM

Figure 23.   Social Media Response to Candidates' Sites
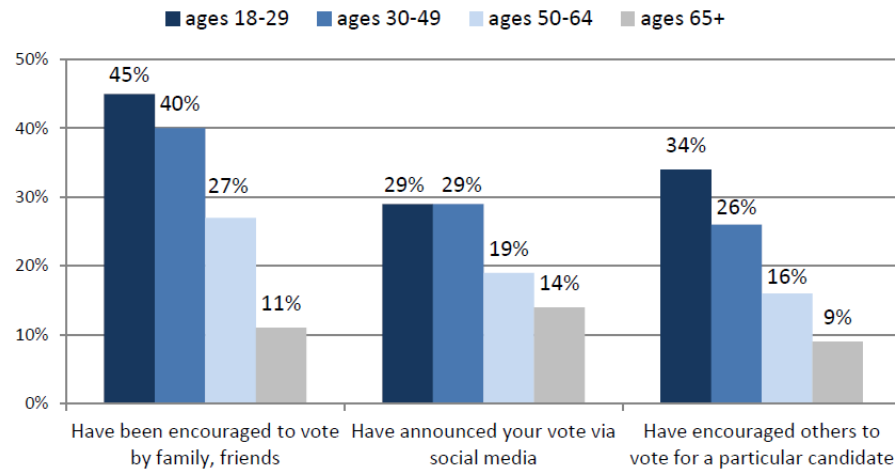(from Pew Research Center, 2012)

President Obama's YouTube subscribers increased by a factor a four, generated over 800,000 reactions (likes, dislikes, and comments), and pulled in over 207 million views. Romney's YouTube channel only brought in 15 million views and generated half the number of reactions.   Despite being new, Twitter gained 18 million followers for the president while Romney only had 787 thousand followers. Exploiting Twitter to the fullest, Obama posted on average 29 times per day. This dwarfs Romney's average of one daily post. Obama's followers retweeted his tweets 150,000 times, 17 times that of Romney's 8,600 (Pew Research Center, 2012, p. 25). Retweets are an important measure as they show increased voter engagement given that retweets are user generated and are shared on a multiplied amongst all followers of the retweeting user. President Obama also made significantly more use of the interactive capability of Twitter by retweeting 404 tweets vice simply tweeting original content. During the same period, Romney only retweeted once and that tweet was from his son Josh (Pew Research Center, 2012, p. 21). Another social media channel that had the potential to foster user interaction was blogs.

The Obama campaign blog allowed the most citizen-generated content compared to other channels. "Four-in-ten posts (42%) were written (or taken, in the case of photos) by citizens" (Pew Research Center, 2012, p. 21). The Romney campaign blog only posted two blog posts that were citizen-generated during the time period of the Pew Research study. Overall, across all channels "the Obama campaign posted nearly four times as much content as the Romney campaign and was active on nearly twice as many platforms" (Pew Research Center, 2012, p. 1). Obama's digital content generated twice the number of shares, views, and comments compared to Romney's (Pew Research Center, 2012). Considering that "voters are playing an increasingly large role in helping to communicate campaign messages" and that "the traditional news media as an authority or validator has...lessened" (Rosenstiel & Mitchell, 2012), it is reasonable to assume that the candidate who mastered the use of social media is more than likely to come out victorious. Although causation between success on social media use and victory in the presidential election cannot be determined from empirical data at this time, history shows the President Obama was reelected with five million more popular votes than Romney (Federal Election Commission, 2013) and that Obama's social media campaign was clearly more effective.

d.   *Study Framework Analysis*

The graph below (Figure 24) shows the significant role social media played in convincing voters and their friends and family to vote. By participating in channels such as Facebook and Twitter, both presidential candidates actively engaged voters on the new frontlines of campaigning. Social media gave the candidates a means to engage voters "in a new level of 'conversation'…transforming campaigning into something more dynamic, more of a dialogue, than it was in the 20th century" (Pew Research Center, 2012, p. 1). Had a candidate not participated in social media, the results would arguably have been disastrous for him.

% of registered voters in different age groups who have used social media like Facebook or Twitter to receive/send voting messages or announce their presidential choice

Figure 24.   Percentage of Voters Announcing Their Vote
(from Pew Research Center, 2013)

The following table (Figure 25) demonstrates how social media has developed its influential niche in creating votes for any candidate.

% of registered voters who are hearing from family and friends about how to vote...

	Urging Obama	Urging Romney
In face to face conversation	29%	32%
Via posts on SNS / Twitter	25%	25%
In phone calls	17%	18%
In emails	12%	15%
In texts	6%	7%

Figure 25.   Percentage by Method That Influences Voters
(from Pew Research Center, 2012)

When combined with traditional means of communicating (phone calls, face-to-face, etc.), social media can have a profound effect on the outcome of an election.

These studies on the presidential campaign showed that social media's ability to deliver messages and ideas on a large scale is unmatched when compared to traditional means. This advantage is further amplified given the interactive nature of social media. Ideas and messages can generate awareness and informed discussion leading to the solidifying or changing in voter decisions. Although, both campaigns did not capitalize on the strength of social media's social learning interactivity, the task of simply putting the message out was sufficiently fulfilled using either campaigns communication strategy. President Obama's campaign gave itself the advantage by staying current with the available social media channels and exploiting the wide reach of each channel. His social media strategy demonstrated the knowledge he had of his audience's communication habits. Indirectly, this saturation of his message into technology that is used every day created a "conversation" about the President and his agenda.

7. Building a Social Media Culture at Dell

a. *Background*

Dell was founded by Michael Dell in 1984 in a college dormitory room. The company grew from a couple of individuals building computers and selling them via a 1-800 number out of a single room, to having over 110,000 employees and \$62 billion in revenue in 2013 (Deshpandé & Norris, 2014). But even with this success, Michael Dell understood the power of collaboration and conversation based on his technology savvy roots. In the 1980s before he started Dell, he discussed how the creation an electronic bulletin board to engage with other early technology adopters provided a social conversation experience and unanticipated collaboration. This set the foundation for the Dell Company to engage in social media platforms in the future (Deshpandé & Norris, 2014).

Despite Dells' focus on listening to their customers, by the mid-2000s those conversations forced Dell to re-evaluate how they would approach this interaction (Deshpandé & Norris, 2014). They soon realized many customers were keeping the conversation one-sided, and derogatory blogs began to surface potentially harming the company's reputation and future sales. Dell had to re-adjust their social media strategy to

engage with the customer or allow the ebb and flow of social media to drive the reputation and lose control of the messaging.

Dell decided to engage the social media concept and begin to implement a strategy that started with hiring Richard Margetic as the director of social media and community in 2005 (Deshpandé & Norris, 2014). He focused on not just implementing social media for consumers, but for their business to business relationships, and for their internal employees. One of his key assessments in the strategy was to be nonspecific on the type of social media platforms used as they change based on audience, functionality, and time, plus things are done differently in various regions and countries throughout the world (Deshpandé & Norris, 2014). A snapshot of the timeline shows the quick changes to the social media strategy as technology changed (See Figure 26).
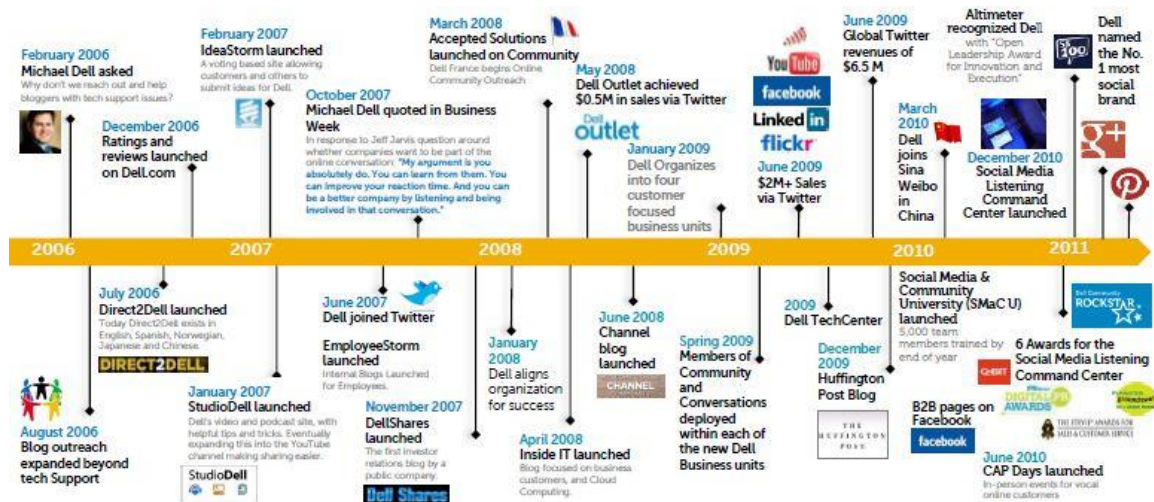
Figure 26.   Social Media Timeline (from Deshpandé & Norris, 2014)

b.   *Method*

There were several aspects to the social media strategy that were implemented. One of the first aspects was to create a social media operations center. After implementing the operations center, Dell created the *Direct2Dell* blog in July 2006 which was directed at customer focused communications to include various Dell events, products, and company news (Deshpandé & Norris, 2014).

66

In 2007, Dell created the *IdeaStorm* blog which was used to allow customers to interface with Dell and announce what they wanted as a consumer. The *IdeaStorm* has been a successful interaction between Dell and its customers. Visiting the website www.ideastorm.com on May 11, 2014, it shows over 20,936 ideas have been submitted, 100,360 comments posted, over 744,287 votes cast about those ideas, and 547 ideas implemented by Dell. These blogs allowed Dell to influence the conversation direction; however, the customers were also able to drive a direction based on their thoughts and ideas. Some of the posts also can reflect a negativity towards certain products or services that Dell offers, but management made the decision to allow negative reviews to remain on the blogs so that Dell could gain trust with the customers (Deshpandé & Norris, 2014). This decision was part of Dell's intent to increase credibility in the social conversation.

Dell then began to branch out and joined all the various social media platforms to ensure robust coverage. Employees began to interact through all the various social media channels with no procedures in place. Dell began to realize that some employees were consistent in their social media presence while others were not. In July 2011, Dell created the Social Media and Community (SMaC) team to "embed social media in the culture at Dell, creating a dispersed – rather than centralized – social media structure" (Deshpandé & Norris, 2014, p. 6). The SMaC team was to serve as mentor and provide guidance to various departments within the company. In August 2011, the team created SMaC University (SMaC U) to encourage Dell employees to be trained in social media. After completion of various courses at SMaC U, those employees were given a certification and allowed to "speak on behalf of the company without worrying about approval from company executives or lawyer" (Deshpandé & Norris, 2014, p. 6). SMaC U proved to be very popular in the corporation with just over 2000 people certified within two months of the launch, and by mid-2013, over 17,000 employees have been trained (Deshpandé & Norris, 2014).

Dell then moved towards implementing an intra-company social media platform as well by using a tool called Chatter provided by Salesforce.com (Deshpandé & Norris, 2014). This tool allowed for employees to publicly or privately communicate online within the company and by 2013, over 10,000 employees was using Chatter on a daily

basis to include the chief executive officer Michael Dell (Deshpandé & Norris, 2014). This social media app allowed the employees to gain insight on various working documents within the company to include new programs and projects and who specifically was working those specific areas.

In December 2010, Dell launched the Social Media Listening Command Center that used the Radian6 monitoring tool (Swallow, 2010) and was able to monitor up to 25,000 daily social media conversations in eleven languages twenty four hours a day, seven days a week (Rooney, 2012). According to a Dell YouTube video tour (http://www.youtube.com/watch?v=-inwU1HsRog) of the Social Media Listening Command Center, Radian6 software allows the Dell command center to follow various conversations around the globe. Each conversation is color coded to be positive, negative, or neutral as well as the amount of influence the conversation originator possesses in the social media world (number of followers, percentage of the conversation, etc.). Any type of viral conversations and the regions they affect around the globe is tracked in order for Dell to address the issue. The software tracks over 400 plus metrics in real time for Dell to evaluate and address.

c. Outcome

In 2009, Dell had discovered how to use the social media platform Twitter to increase revenues by "tweeting" links to Dell products resulting in an increase of $6.5 million in sales since it first joined Twitter in 2007 (Deshpandé & Norris, 2014). Dell also used a Twitter handle @DellOutlet to advertise deals for its online store to its Twitter followers which increased sales by $3 million (Deshpandé & Norris, 2014).

By using online forums on various social media platforms, customer support technicians were able to service calls to its Service department by 20% in 2012. This also increased employee productivity by 15% as the online forums were less expensive than traditional service call center cost structure (Deshpandé & Norris, 2014). Of note, some of the solutions for problems came from actual Dell customers as advocates for Dell products. Their ability to resolve problems and put it out on social media reduced the burden on Dell for all service issues.

Dell's net promoter score (NPS) also increased. "NPS scores measure key enablers in the areas of creating value, getting it right the first time, effortless resolution, and world class online experience" (Deshpandé & Norris, 2014, p. 6). Dell used these metrics to determine their ability to provide a quality customer experience. These scores increased by 59% in the first year (2010) and increased by another 39% the following year (Deshpandé & Norris, 2014).

Dell's SMaC University is well renowned in the social media circles. It has grown in just three years from a small certification course for a few hundred employees to over 28 individual courses for over 17,000 certified employees from 55 different countries. Over 500 companies have visited SMaC U to observe and compare their social media progress (Deshpandé & Norris, 2014) with that of Dell's. SMaC U was also able to provide the training and certification necessary within the organization to ensure Dell employees would participate in the social media universe in a very consistent and timely manner.

d.   Study Framework Analysis

The Dell approach was to ensure the right types of media were to be used to train and interact with their employees as well as their customer base. They used the concept of Media Fit to address various messages to ensure the appropriate media for complex messages and more lean media for less ambiguous messages.

They used a high Media Fit approach when they created the SMaC U. In order for an employee to have the authority to interact in the social media realm without any approvals from the company, they had to be certified in various courses at SMaC U. Due to the complexity of advertising and the legalities involved, as well as the potential pitfalls of the social media universe, face-to-face training was conducted. These resident courses allowed not only one-to-many training, but also allowed for social conversations to take place in a highly interactive environment. It gave any employee willing to get certified through the program the necessary tools and knowledge, credentials, and self-efficacy to speak on behalf of Dell in the social media universe without executive

management or legal screening approvals. This approach had a direct influence on changing Dell employee behavior in social media.

Dell's approach also focused on interactivity and collaboration between employees to employees, employees to customers, and customers to customers, thus falling very high along the social learning interactivity axis. They encourage the advocacy of their customers to help solve other customer's issues by having forums to offer solutions such as the Dell *IdeaStorm* website. This approach encouraged a social conversation about a wide variety of issues, whether it was technical problems with Dell products, or new ideas that Dell should implement for the customer base. Problems that may appear to be more complex to solve than an advocacy approach prompted Dell to look into the specifics and address it at a corporate level and respond through various social media avenues.

8.   Social Media and Customer Dialog Management at Starbucks

a.   Background

Starbuck's has been a powerhouse brand that not only offers great coffee, but an experience that is second to none. Starbuck's has constantly focused on the customer and the finest details of the customer experience. Starbucks recognized that the products and services offered by their company must evolve to ensure it meets the needs of its customers to include reaching out to the customer the way they wanted to be communicated with on a daily basis. Once social media began to take a foothold in everyday culture during the early 2000s, Starbucks began to incorporate social media interaction into the Starbucks experience. By 2009, Starbucks 17,000 worldwide outlets, 130,000 employees, and $9.7 billion in revenue was ranked as number three in the food service category as well as the top firm for social media engagement (Gallaugher & Ransbotham, 2010).

Starbucks was also a company that believed in social and corporate responsibility within the various communities in which they serve customers and acquire resources. Starting in the early 2000s, Starbucks produced the Global Responsibility Report Goals and Progress on an annual basis (www.starbucks.com) to show their commitment to

various responsibility topics such as the environment, fair trade, and community involvement. Starbucks knew that these issues were very important to their customer base as well, and that many of these customers were communicating through social media about these issues. When it came to social and corporate responsibility, it was a budding relationship between Starbucks as a company and their customer base.

b.   *Method*

Starbucks has been aggressive in adopting various technologies to better improve the customer experience. They decided to create an online forum for Starbucks customers called *MyStarbucksIdea* from Salesforce.com (Gallaugher & Ransbotham, 2010). This online community was designed to offer polls to gauge various interests of the customers as well as developing new ideas for potential products (Coffee, Frappuccino, Food, and Merchandise), experience (ordering & payment, atmosphere & locations), and involvement ideas (building communities, social responsibility, involvement ideas in and outside the U.S.). In 2008, there were over 180,000 individual users registered with *MyStarbucksIdea* that had provided over 80,000 new ideas of which 50 had been implemented (York, 2010). As of May 17, 2014, *MyStarbucksIdea* had created 128,750 new Product Ideas, 41,690 experience ideas, and 24,711 new Community Involvement Ideas. Starbucks even offered financial motivation for contributors to the site by offering a Starbucks Gold Card to the top 100 contributors to the website (Gallaugher & Ransbotham, 2010). Their website even posts a monthly leaderboard where registered users receive points for ideas, positive votes from other users about the idea, comments posted about other people's ideas, and voting for someone else idea. This leaderboard promotes interactivity amongst the users and gives them the some stature within the online community.

The company also engaged in multiple platforms in the social media universe to include not only their own media platform (*MyStarbucksIdea*), but also the mainstream social media platforms such as Facebook, Twitter, YouTube, Pinterest, and Google + (Schoultz, 2014). Starbucks is able to reach out to millions of customers through social media, and recent figures show that Starbucks has 33 million followers on Facebook, 3.5

million on Twitter, 1.0+ million on Google +, and 76 thousand on Pinterest (Moth, 2013) as well as almost 30 thousand YouTube channel subscribers.

Each of the different platforms reach to slightly different target audiences, and Starbucks used them to promote various business ideas. Starbucks used YouTube to focus on corporate social responsibility and promote music they sold, Foursquare phone app to provide locations for nearby Starbucks and provide instant advertising when an individual arrived in the vicinity of a store, Facebook for forum posts, promotions, and loading Starbucks payment cards, and Twitter for various topics such as jobs, environmental impact, and partner promotions (Gallaugher & Ransbotham, 2010).

In order to ensure the social media strategy was implemented and in alignment with Starbucks overall strategy, Starbucks created several positions that focused only on social media. They created a position called the Vice President of Brand, Content and Online and complemented that position with six full time staff members to coordinate with the dozens of staff partners with the functional areas of Starbucks (Gallaugher & Ransbotham, 2010). Starbucks social media group used the various platforms to monitor the social media conversations concerning their products and services. The monitoring of positive and negative feedback through the *MyStarbucksIdea* website forums, demographic data and "Likes" on Facebook, Twitter metrics for keywords and "click-throughs" on various advertising campaigns, and the loyal and lapsed customer metrics from the Foursquare app, continually kept Starbucks at the forefront in the use of social media (Gallaugher & Ransbotham, 2010). The metrics that Starbucks was measuring allowed the social media team to continually adjust the social media strategy to keep it in alignment with the overall Starbucks strategy.

The Starbucks social media group also focused on monitoring all social media conversations. Keeping with the ideal that social media must be honest and credible, positive or negative comments were allowed to be posted; however, the social media group was always looking to counter false comments and prevent social media hijacking. The Starbucks social media group was a key contributor to helping Starbucks culture get involved in the social media universe.

c.   ***Outcome***

Starbucks conducted a Free Pastry Day campaign using Facebook in 2010, prompting over 1 million patrons to visit Starbuck locations in one day (Gallaugher & Ransbotham, 2010) with printed out free pastry vouchers from the original Starbucks Facebook post (York, 2010). Although there were no published numbers with respect to overall sales increase for this one day campaign, increasing foot traffic in stores most likely added to additional sales.   In 2010, Starbucks had sales gains in same store comparisons in a quarter over quarter comparison for the first time in two years by focusing on digital and social media advertising versus the traditional television advertising campaigns (York, 2010).

Starbucks has been able to use various platforms to have specific advertising campaigns such as a new product campaign in 2011 that gave away free Blonde Roast coffee to individuals through Facebook and Twitter. Starbucks also created the Pumpkin Latte campaign where Starbucks was advertising its return of the flavored latte by offering it one week early to the city that could rack up the most points using a special Facebook App. This generated a significant amount of traffic on the Facebook page with the ultimate winner being Chicago with over 10 million points (Moth, 2014). Another campaign used on Twitter was the 2013 promotion called *Tweetacoffee* as a way for individuals to purchase coffee for their friends. This campaign resulted in a return of $180,000 (Wasserman, 2013).

In 2009, Starbucks made a bold move to advertise on social media and the digital universe compared to the traditional television advertising paradigm that businesses were accustomed. They were able to increase same store sales despite a shift from traditional business advertising (York, 2010). The culture change from participating in social media to actively engaging in social media was a result of Starbucks management pursuing social media as not just a tool, but an interactive communication channel between corporate and its customers.

d. *Study Framework Analysis*

Starbucks was able to focus various advertising, messaging, and idea generation through a variety of social media platforms. Their approach focused very high on Media Fit based on the specific approach. They used simple images and messages to promote social responsibility through platforms such as Pinterest and Twitter. Those messages would not only generate conversations in the social media universe, but prompted many a conversation amongst the patrons and employees at Starbucks locations. On more controversial or complicated messages, Starbucks focused on a higher Media Fit towards their customers. Using a social media platform like YouTube to discuss a social responsibility issue (i.e. fair wages for coffee growers in foreign countries) to ensure that the various natural media cues would be present (voice inflections, facial and non-verbal movements, etc.).

The creation of the Starbucks media group was a key contributor in changing corporate attitudes towards social media. Creating a full time staff to become the social media experts gave the company the confidence to actively engage in the social media universe. Each department could now consult with the social media group before engaging in a social media campaign allowing the necessary expertise to ensure effective communication.

The *MyStarbucksIdea* was an example of placing high along the social learning interactivity axis. It promoted social conversation through the forums not just from customer to customer, or customer to business, but business to customer as well. The immediate feedback from other customers and Starbucks to ideas posted by an individual allowed for collaboration and customer advocacy. Customers could collaborate with other customers by adding suggestions to a previous post to come up with a bigger proposed idea. Starbucks could then indicate via an icon on the website that they were in the process of reviewing it and then post a response allowing website participants to gauge how Starbucks was proceeding on a specific idea.

C.   CROSS-CASE ANALYSIS

Influencers identified from the eight within-case analyses were then compared with each other in a cross-case analysis to distinguish recurring themes in successful social media campaigns. The influencers from the cross-case analysis are listed below.

1.   Exposure

Each of the cases focused on reaching out and exposing the required individuals or groups to the intended message. Each organization recognized that individuals are tied into the organization through different communication channels.

a.   *Multiple Platforms*

Utilizing *multiple platforms* ensures that your message receives the widest distribution possible. The Flex Your Power and Stanford Three Community case studies utilized radio, television, and print media to reach their intended audiences. CISCO, the 2012 Presidential Campaign, Starbucks, Dell, and Tupperware Nordic case studies all used combinations of Facebook, Twitter, YouTube, Flickr, and other current social media technology to communicate with their audiences. Of the case studies that we observed, none of them relied solely on any single platform to achieve success in communicating their message.

b.   *Repetition*

Employing multiple platforms also ensures *repetition*. Clear and simple messages with a consistent theme served as simple reminders to take action. The constant exposure of the message increases the likelihood that desired actions will be taken. Examples observed from the case studies include radio and television commercials encouraging residents to turn off lights and perform other energy conserving measures during the Flex Your Power campaign, reminders on Facebook and Twitter to vote during the 2012 presidential election, and notices about upcoming promotional events at Starbucks via Google+ and Pinterest. Regardless of the message to be communicated, repetition was necessary over multiple platforms to ensure adequate exposure.

c.   *Targeting the Audience*

In addition to the use of multiple media platforms, each organization strategically and effectively *targeted their audiences*. For example, we observed the effectiveness of providing media in different languages or providing ethnic themed commercials in the Stanford Three Community Study and the Flex Your Power campaign. We also observed how game applications promoted active learning and engaged the IT professionals and engineers during the CISCO ASR 100 launch.

2.   Keeping "Social" in Social Media

The organizations recognized that social media couldn't be a one way communication channel. Social media is social in nature, allowing for individuals to participate in a social setting by exchanging messages and ideas and working through the social network to creating a one-to-many communication channel.

a.   *Generating New Ideas*

Social media has the potential to *generate new ideas* and encourage collaboration to improve products and processes. Dell and Starbucks greatly benefited from "idea generators" which helped them to better understand the desires of their customer base. Several ideas provided by consumers ultimately led to new product development and service initiatives. Tupperware Nordic also employed a similar approach where sales personnel and distribution centers could provide their recommendations on social media platforms to upper management to improve internal processes. The idea generator-style platforms enabled open and honest discussion without regard to position or status within the company. It essentially flattened the hierarchy and reduced communication barriers between lower level employees and upper management, allowing for companywide collaboration.

b.   *Advocacy*

One of the key attributes that was attributed to the various organizations within the case studies was *advocacy*. In the Dell, CISCO, and Starbucks case studies, various groups of individuals who participated in the social media spectrum could be classified as

either advocates for the organizations (defending a product or service), or an advocate for another customer who had a similar bad experience. If the organization has a solid brand, then the majority of advocacy will be positive in nature. It is beneficial to allow these individuals to form the various advocate groups within the social network. This allows the organization to step back and allow the advocates to solve simple issues and/or defend the products or services.

c. Social Interactivity

Effective social media campaigns must facilitate *social interactivity*. We observed in the Starbucks and Dell case studies that candid engagement between the customers and company support staff transpired. These social media platforms enabled consumers to communicate directly with company staff to provide feedback concerning products and services. Dell even designed the company social media policy to allow customers to provide 80% of the discussion while Dell employees only contributed 20% to the conversation. This was a conscious effort by Dell management to prevent the customer from feeling as if the company was dominating the conversation. The customers were participating in the forums to have their voices heard and that requires the company to listen.

The Flex Your Power campaign also generated discussion amongst the stakeholders. Elementary school students discussed their wasted energy calculations with their parents which resulted in their parents becoming more energy conscious. Dialog about energy conservation also penetrated the commercial, industry, government, agricultural, and residential segments and ultimately led to a significant reduction in energy consumption.

3. Authenticity

The various organizations within the selected cases realized if social networks were to be accepted by the various stakeholders, it would require having authenticity. This requires that various opinions are presented for all to see in a transparent manner and each of the opinions are actually reviewed and taken into consideration. If the social

media appeared to be controlled by the organization with no legitimacy given to the various participants, the desire for stakeholders to participate diminished.

a. *Positive and Negative Feedback*

Both *positive and negative feedback* should be accepted when using social media. In the cases of Starbucks and Dell, they had social media platforms that facilitated free and open discussion where consumers could post both satisfactory and unfavorable remarks. Instead of trying to cover up or delete adverse comments, the staffs worked to find a solution to the stated problem. Their efforts gained the trust of their customers and boosted the company's credibility as a result.

b. *Reviewing Input*

Several of the case studies demonstrated the importance of *reviewing input* provided by external consumers and internal consumers alike. In the Tupperware Nordic case study the chief executive officer personally took time to read all of the comments posted by his subordinates. Once his employees knew that he was reading their comments, they felt empowered to contribute more to the social media platforms. Contrarily, the employees at TEKCO discovered that upper management was not reading their comments posted on internal social media platforms. Additionally, TEKCO assistants who were delegated the task of reviewing the social media platforms edited or deleted the comments provided by employees. This led to a perception that contributing to social media platforms was not worth the effort.

Starbucks and Dell realized the importance of reviewing the content provided via social media channels and hired a full-time staff to monitor company social media platforms. This monitoring allowed staffers to review input and provide almost instant feedback to the customer. To ensure adequate review and feedback, Dell even established a training program (SMaC U) to train employees to respond appropriately to comments provided via social media.

c.   ***Genuine Output***

Another characteristic observed in successful social media campaigns was *genuine output*. The importance of genuine output was demonstrated in the Tupperware Nordic case study. In this example, the chief executive officer's actions on social media platforms mirrored his actions in real-life. As a result, employees perceived their leader's messages and comments as trustworthy and authentic. Employees and consumers understand that regardless of the product or service, nothing is infallible. Positive and negative concerns must be present to ensure genuine output.

Consequently, TEKCO's actions on social media platforms did not correspond with actions physically displayed by company leadership. TEKCO subordinates did not sense genuine feedback from their superiors which led to miniscule acceptance of social media within the company and eventually led to the downfall of the social media within the company.

D.   FINDINGS

The theoretical framework developed from the literature review was not predictive, but rather, served to guide the selection and analysis of cases. Based on the within-case analyses and cross-case analysis, the researchers developed a model explaining the process through which social media influences behavior change (See Figure 27).
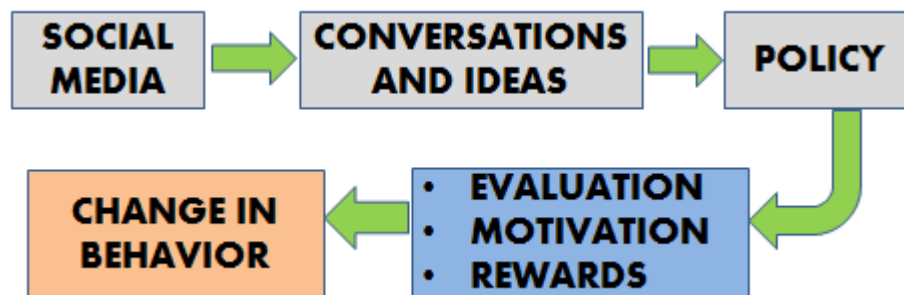

Figure 27.   Process Model

The use of social media is the first step in the process model. The social media approach can be either single platform or multi-platform. All cases selected for this study used a multi-platform approach to take advantage of the unique ways that each social media platform attracts and interacts with specific audiences. The analysis suggests that a multi-platform approach is better for any large organization that has diverse audiences.

The analysis indicates that a multi-platform social media approach leads to the generation of conversations and ideas. Each of the organizations in the selected case studies used the most popular three to four social media platforms available during their specific campaign launch. This approach was designed to get maximum exposure to the targeted audience of the message or conversation. The intent is to not oversaturate the individuals, but ensure that the message is provided through the specific social media platforms in which the individual decides to participate in.

The conversations, whether initiated by the organization or initiated by the individual, lead to ideas that can be further evaluated by the organization for merit. Interactive forums, such as the Dell *IdeaStorm* website, enable conversations to take place by allowing participants to voice their ideas and opinions. These ideas and opinions could then be developed and supported or debunked based on the advocacy of various stakeholders participating in the social network.

If the ideas that emerge from conversations are legitimate based on organizational goals and objectives; they can lead to a policy change. From a business perspective, this is simply the addition of a new product line or service in which social media and conversations have shown as a need based on stakeholders. From a governmental perspective, examples would include: improving processes, improving various efficiency measures, and reducing resource cost for a specific program.

In military organizations specifically, policy change is paramount in order to change how individuals are evaluated on job performance. Effective organizational processes for evaluating individual performance include reward systems (e.g. pay bonus, increased promotion opportunity, and informal recognition) that develop and motivate behavior in line with organizational goals. Ideally, the evaluation process will be aligned

with organizational objectives. Individuals will perform based on how they are evaluated. The objectives of their evaluation should be in line with the desired end state of behavior.

1. Implications

a. *Social Media and the Modeling Process*

As discussed in the literature review, the modeling process involved four basic steps: attention, retention, reproduction, and reinforcement/motivation. This modeling process was initially created by observing one-to-one interactions. Social media allows for a many-to-many interaction that exposes him/her to various potential social media behaviors; however, the vast majority of social media is written in nature. Social psychology shows that individuals are able to retain and reproduce modeled behavior through verbal and image codification versus just written communication. This supports the basic premise that communication is most effective when done in a face-to-face or more natural environment.

In a traditional setting, individuals are influenced by their immediate synchronous supervisors. The supervisor tends to model the expected behavior for his/her subordinates. Supervisors are evaluated based on their subordinates' performance and reward subordinates accordingly. Often this is done in a traditional one-to-one format and may not necessarily be seen by others.

Social media allows the opportunity to increase the number of individuals that can observe an individual receiving a positive (or negative) reward through the broadcasting of such a reward through the various platforms. For instance, individuals who are able to provide a new idea, product, or service, can be rewarded publicly through social media. Within that social network, the individual is lauded, and that individual gains some additional influence and/or increased status. That network can exert the influence it has with other networks promoting the positive message. This is a tremendous tool extending the reinforcement of positive and negative behavior beyond the immediate network of employees to others within the company that may be geographically separated; however,

behavioral change is more likely to occur through the face-to-face modeling process as it allows for fewer misinterpretations of the expected behavior.

The researchers conclude that social media can be a worthwhile reinforcement mechanism to promote positive behaviors through a multi-pronged approach through targeted audience exposure. As more individuals and social networks are exposed through social media the types of behavior that are rewarded, it lends legitimacy to that behavior and encourages potential behavior change. Diverse social networks within organizations will prefer to interact with different types of social media. The use of multiple social media platforms, gives organizations greater capacity to engage in conversation these diverse networks within the entire organization.

As shown in the process model (Figure 27), the USMC can use social media to interactively engage in conversations with various stakeholders to determine what changes in policy or processes need to occur to meet organizational objectives and goals. Engaging stakeholders in conversations through social media will result in policies more likely to affect behavior change at the influencer level and become modeled behavior emulated throughout the organization.

b.   Hierarchy

The military's hierarchical structure could potentially prevent junior personnel from presenting new ideas and sharing insightful thoughts that might lead to energy efficient actions. In several of the for-profit cases studies we examined, personnel from various hierarchy levels of the company were actually encouraged to provide suggestions to improve company processes. This process included providing negative feedback without fear of reprisals from immediate supervisors.

c.   Sensitive Information Concerns

The Department of Defense must also address sensitive information concerns. External social media platforms were able to be viewed by not only internal employees but any individual with an internet connection and online community registration. The military has to be cognizant of potential operations security (OPSEC) issues. This is

addressed in "The Social Corps", but in developing a specific social media strategy, it must be on the forefront in the implementation plan. While the military can monitor the social media conversations just as their private sector peers do, the potential release of classified information seldom applies to the private sector.

d.   Social Media Trends

Studies conducted by the Pew Research Center on social media trends of the digitally-connected, show an increase in the use of the internet and social networks as a means of communication. A study conducted by the U.S. Marine Corps Public Affairs Division, shows a similar increase in the use of social networks and other digital resources as a means of communicating news. Both studies point to a shift away from traditional means of communicating amongst all demographics, military and civilian, especially by those users between 18-29 years old. This group, commonly referred to as Millennials, includes the largest age group by percentage within the Marine Corps. In order to effectively communicate with the Millennials, the Marine Corps, as well as private sectors business, must connect with them in an environment that is natural and effective from the Millennial perspective.

2.   Recommendations

Based on the findings from this study, there are two specific recommendations to answer the following research questions:

- How might the Marine Corps use social media?
- What are the influencers to successfully implementing a social media campaign?

The first recommendation is designed to answer the research question: how might the Marine Corps use social media? The researchers recommend the E2O experiment with an "Idea Generator" website. This website has the potential to make a profound impact in energy conservation and practices. Although some additional focus group research will need to be pursued in order to adequately develop and launch such a website, it potentially could develop significant ideas, and at a minimum, provide honest feedback regarding specific equipment, procedures, and policies that are currently in

place and what recommendations that end users have to improve energy performance. Proper initial design, implementation, participation, and interactivity will be paramount in developing a successful product. Currently the United States Navy is experimenting with a similar type website called Idea Scale. This program is designed to encourage the most junior sailors to senior officers to provide input in the context of reducing administrative distractions (RAD).

The second recommendation is designed to answer the research question: what are the influencers to successfully implementing a social media campaign? A social media strategy that is developed to incorporate the following influencers: social in social media, authenticity, and exposure. Each of these influencers has various three sub-influencers that encourage engagement and active participation within the social media networks. The influencers are the key attributes required to ensure social media success.

### a.	"Idea Generator" Website

The companies that were studied who employed this approach appeared to develop several key results that could be highly beneficial to the E2O. The "Idea Generator" website was able to connect with the customers that followed the brand in very unique ways. The website allowed individuals to contribute ideas and suggestions to the company that fit their specific needs. At the same time, it allowed many of these raw ideas to be further developed by other customers and eventually created an advocacy base. This advocacy base responded to negative inputs and solved problems at the lowest-level possible. Even a few good ideas or best practices by those who deal in the energy production and consumption could help the E2O develop new ideas to increase energy efficiency. This interactive website allows for collaboration throughout the energy community within the USMC. Although Dell had a 2.61% rate (547 of 20,936) and Starbucks a 0.01% rate (50 of 80,000) of implementing new customer ideas, over 100 thousand new ideas were submitted. The potential for the E20 could be very rewarding.

Secondly, the website allowed for bi-directional initiation of conversations. The company could initiate a conversation and monitor the reaction of the customer base to test specific topics and receive honest feedback. The customer could also initiate a

conversation and either develop advocacy from other customers for the topic or rescind based on the lack of advocacy based on responses from other customers. This is simply done by something as simple as a "like" or "dislike." By having various tracking mechanisms for influential contributors (i.e. leaderboards, most influential contributors, etc.) it gave idea generators and influential social media participants status in the social media universe.

Lastly, additional topics or areas of interest could be added to the website as it evolves based on the needs of the company and/or the desires of the customers. These additions can bring different groups focused on specific portions of a company's brand into one location with the hopes of adding more diversity to the conversation. For instance, Dell's *IdeaStorm* website has various categories from products and services, to education and women's interests. Each of these categories allow for different social networks and groups to interact with Dell and provide ideas and feedback.

The E2O could develop a similar Idea Generator website that combines the various topics of interest to not only the E2O, but to the various stakeholders involved that can effectively improve energy efficiencies through new ideas and practices throughout the USMC.

b.   Social Media Strategy Development

Based on the case study analysis, the companies that were successful had a specific social media strategy in place. The strategies incorporated three influencers and nine sub-influencers that contributed to social media campaign success. The researchers recommend that the E2O look to incorporate these influencers into their social media strategy.

Keeping "social" in social media was the first primary influencer with ability to generate new ideas, social interactivity, and advocacy as the sub-influencers that affected social media strategy. By using social media platforms that allowed customers (internal and external) the ability to generate and post new ideas, gave those individuals a vested interest in the product or service. This participation allowed for social interaction between customer to customer, business to customer, and business to business.

Individuals were able to promote their ideas for social recognition and prestige without requiring a formal process to pitch ideas. This ownership in the brand also created advocacy networks who worked in a social setting to solve either company issues or fellow peer issues.

It is recommended that the E2O should use the "Idea Generator" website as the mechanism to allow for this primary influencer and sub-influencers. It will allow for idea generation to occur in a social environment with a professional Marine flavor.

Authenticity was the second primary influencer with positive and negative feedback, review of input, and genuine output as the sub-influencers. Customers recognized that no one person or company is infallible. Each of these companies allowed both positive and negative feedback to be posted onto their various social media platforms. Although there was some sort of monitoring mechanism in place to prevent inappropriate or malicious social media content, legitimate negative content was allowed to be posted. This gave the platform authenticity in the communication posted. It also helped motivate the advocacy base for those posts that were inaccurate or disingenuous.

It is recommended that the E2O allow authenticity into their social media strategy. If the interaction does not seem authentic, individuals are less likely to participate. There is possibility that certain topics may elicit responses not expected by senior leadership, but as long as it is done in a productive and professional manner, it should be allowed. An individual that has a criticism, very well may have the next great solution.

Exposure was the third primary influencer with multiple platforms, repetition, and targeted audiences as the sub-influencers. Ensure adequate exposure across the audience was vital. There may be certain segments of the audience the company chose to target and that targeting may require specific social media platforms based on individual's social media preference. Repetition is another key sub-influencer as many individuals follow multiple forms of social media. The key here is to ensure you reach your targeted audience. The last key sub-influencer is a multiple platform approach. Each company recognized that social media has platforms have changed in the past, and will change

again in the future. It is imperative that the strategy is not stagnant on just a few specific platforms.

The E2O should consider developing a multi-pronged approach along the social media spectrum. The social media strategy should link the target audience with the applicable social media platforms and link them with the appropriate metrics. This approach can also be tied into the "Idea Generator" concept. The E2O use the main social media platforms initially (Facebook, Twitter, and YouTube), but allow for the flexibility to expand into other social media platforms as their customers request or technology creates. Using the "Idea Generator" website, allow the customers to drive what social media platforms they want to engage in. This could be accomplished by asking for input from the customer base and/or conducting short polls/surveys on the website.   This also allows for the flexibility to encourage additional platforms as the strategy expands.

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VI. CONCLUSION

A. FINAL THOUGHTS

This research was designed to draw conclusions from a comparative case study analysis approach to determine if social media is likely to be effective in the shaping attitudes and behaviors in the U.S. Marine Corps towards energy performance, the influencers for successful social media campaigns, and how best the E2O might use social media.

Social media can be effective in shaping attitudes and behaviors, but not necessarily in a direct causal manner. Social media is a powerful tool to create the necessary conversations and ideas that can lead to policy change. Effective policy will have specific objectives that the organization and individuals are accountable for and measure on to determine satisfactory performance which will guide individual and organizational behavior. This reiterative process will be refined multiple times as more individuals are involved in the conversation and more ideas are presented.

The research approach worked towards analyzing various organizations (government, non-government), various goals (public, for-profit), and various audiences (external customers, internal employees) to determine if social media was effective in accomplishing organizational goals and influencing behavioral change. This chapter briefly describes the limitations and implications of the research conducted, recommended further research, and the benefits of this study.

B. LIMITATIONS

Several of the case studies were conducted in the late 2000s and early 2010s. Social media platforms, utility, and use have increased dramatically over the past few years. As more and more companies (both public and private) are seeing the potential benefits, more and more are investing in social media. Attitudes and expectations of both the organization and the customer could have potentially have changed from the time these case studies were analyzed by the original authors. Follow on investigation,

research, and surveys to each of these organizations and their customer base would have been prudent given the necessary resources and time to conduct such a follow on study.

There is also no clear consensus in the academic community with respect to the true effect of social media on organizational behavioral change. The lack of empirical evidence to directly correlate the implementation of social media and long-term behavioral change requires researchers to make assumptions as to whether a change is direct or indirect in nature. As more and more social media analytic companies come online, and more research is done in a quantitative approach, future results may sway an organizations decision on whether to participate in external and internal social media for the purpose of behavioral change.

C. RECOMMENDED FURTHER RESEARCH

There are several topics that are recommended for further research based on this study. The case study analysis indicates that social media deployment will create conversations about the specific intended messages by the originator, but further research may be able to clearly focus on the intended target audience to yield the most effective results.

- Conduct a survey amongst the various age groups and ranks within the USMC to determine what characteristics (categories – i.e. Energy Practices, Energy Equipment, Energy Challenges, Energy Administrative Requirements, etc.) of an "Idea Generator" website would prompt participation by the individual Marine. This would require a prototype of an "Idea Generator" type website format developed by a focus group. Possible consultation with the company Salesforce may provide additional technical expertise. Purpose - to develop a working website format to entice participation within the USMC.

- Conduct a survey or analyze the initial metrics/results of the United States Navy Idea Scale website. Purpose – to determine cross over potential and appropriate resource allocation to ensure return on investment.

- Conduct a survey amongst the various USMC Military Occupational Specialty (MOS) that are directly involved in energy to determine if they are more likely to participate than non-energy MOS personnel. Purpose - to initially target the E2O primary audience.

- Conduct a site visit to Dell Corporate Headquarters (multiple companies have these types of Command Centers – CISCO, Starbucks, etc.) to learn

more about their Social Media Command Center and Social Media and Community (SMaC) University to better understand how they incorporate social media training for employees, monitor social media in the cloud, and how they link the two into a coherent strategy. Purpose - to develop best practices from industry leader(s) for potential adoption by the E2O.

D.   BENEFITS OF THIS STUDY

The benefit of this study was to provide the E2O with actionable recommendations to address the effective use of social media in shaping attitudes and behaviors. Through analysis of various academic literatures and a comparative case analytical process, the research recommends the E2O develop an "Idea Generator" website in order to develop social conversations about improving energy conservation and practices. The website has the potential to develop significant ideas and provide authentic feedback regarding specific equipment, procedures, and policies to improve energy performance within the USMC. In addition, the research recommends that a social media strategy be developed that incorporates three primary influencers and their respective sub-influencers: keeping "social" in social media, authenticity, and exposure. The influencers and sub-influencers will provide a successful social media strategy.

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